PECH CENTER 1600/2000 Tue Apr 1 16:16/16/18/09 [BLASTP 2.2.2 [Jan-08-2002], NCBI] /home/glinda/vf/Legal/byeung/pl.DNA40370 (452 aa) /home/glinda/vf/Legal/byeung/pl.DNA40370 Database: day (2,655,410 seqs, 680,241,903 aa) Mar 24, 2003 2:54 PM Locus list: hum (596,938 seqs, 114,350,192 aa) Matrix: BLOSUM62, T: 11, A: 40, X1: 16, X2: 38, X3: 64, S1: 41, S2: 75, eval: Gap Penalties: Existence: 11, Extension: 1 Sequences producing High-scoring Segment Pairs: Score Match Pct E-val 1 P_ABB84842 Human PRO302 protein sequence SEQ ID NO:52 2382 452 100 2 P_ABB95448 Human angiogenesis related protein PRO302 2382 452 100 0.0 3 P_ABP65102 Hypoxia-induced protein #28 - Homo sapiens 2382 452 100 4 P_ABB99215 Human retinoid inducible serine carboxypep 2382 452 100 0.0 5 P_AAB80255 Human PRO302 protein - Homo sapiens. 2382 452 100 0.0 6 P AAB20341 Human PRO302 - Homo sapiens. 452 100 2382 0.0 7 P_AAB93913 Human protein sequence SEQ ID NO:13882 - H 452 100 2382 0.0 8 P_AAE06595 Human protein having hydrophobic domain, H 2382 452 100 0.0 452 100 9 P_AAY88378 PRO302, vitellogenic carboxypeptidase homo 2382 0.0 10 P AAY13387 protein PRO302 - Homo sapiens. 452 100 2382 0.0 11 P_AAY05768 Human PRO216 (vitellogenic carboxypeptidas 452 100 2382 0.0 12 CAC51169.1 unnamed protein product - Homo sapiens 452 100 2382 0.0 13 AAG16692.1 serine carboxypeptidase 1 precursor protei 452 100 2382 0.0 14 BAB55069.1 unnamed protein product - Homo sapiens 2382 452 100 0.0 15 NP 067639.1 serine carboxypeptidase 1 precursor protei 2382 452 100 0.0 16 RISC HUMAN Retinoid-inducible serine carboxypeptidase 452 100 2382 0.0 17 P AAU96225 Human secreted protein, SEQ ID No 127 - Ho 2372 451 100 0.0 18 P_AAB41675 Human ORFX ORF1439 polypeptide sequence SE 2306 439 97 0.0 19 AAG39285.1 MSTP034 - Homo sapiens 2116 402 100 0.0

>1 P_ABB84842 Human PRO302 protein sequence SEQ ID NO:52 - Homo sapiens. (452 aa) [1 seg]

Score = 2382 (922 bits), Expect = 0.0

Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452

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	DNA40370	61	SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
P.	_ABB84842	61	SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
•	DNA40370	121	GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
P _.	_ABB84842	121	GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
	DNA40370	181	YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
P	_ABB84842	181	YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
	DNA40370	241	VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
P_	_ABB84842	241	VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
	DNA40370	301	VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
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P ABB84842 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
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          61 SCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
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P ABB95448
          61 SCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLOAASLLFVDNPVGT
  DNA40370 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
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P ABB95448 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFY1FSESYGGKMAAGIGLEL
  DNA40370 181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
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P ABB95448 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
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           1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
           61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
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61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT

P ABP65102

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P ABP65102
            181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
  DNA40370
                ***********
            181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
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>4 P_ABB99215 Human retinoid inducible serine carboxypeptidase - Homo (452 aa)
[1 seq]
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  DNA40370
                    ***********
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            181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
P ABB99215
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  DNA40370
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>5 P_AAB80255 Human PRO302 protein - Homo sapiens. (452 aa) [1 seg]
 Score = 2382 (922 bits), Expect = 0.0
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  DNA40370
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P AAB80255
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  DNA40370
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  DNA40370
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>7 P AAB93913 Human protein sequence SEQ ID NO:13882 - Homo sapiens. (452 aa) [1
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Score = 2382 (922 bits), Expect = 0.0
Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
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>9 P_AAY88378 PRO302, vitellogenic carboxypeptidase homologue amino acid
sequence - Homo sapiens. (452 aa) [1 seg]
Score = 2382 (922 bits), Expect = 0.0
Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
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 Score \approx 2382 (922 bits); Expect = 0.0
 Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
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  DNA40370
                ***********
P AAY13387
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  DNA40370 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
P AAY13387 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
  DNA40370 361 INVTVYNGOLDLIVDTMGOEAWVRKLKWPELPKFSOLKWKALYSDPKSLETSAFVKSYKN
P AAY13387 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               **********
P AAY13387 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>11 P AAY05768 Human PRO216 (vitellogenic carboxypeptidase homologue) - Homo
(452 aa) [1 seg]
Score \approx 2382 (922 bits), Expect = 0.0
Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
               ************
P AAY05768
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370 61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
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**************** P AAY05768 61 SCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLOAASLLFVDNPVGT DNA40370 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL P AAY05768 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL DNA40370 181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEOVLNA P AAY05768 181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA DNA40370 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH P AAY05768 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTOSHLVCLCORH 301 VRHLORDALSOLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG DNA40370 P AAY05768 301 VRHLQRDALSQLMNGPIRKKLKIIPEDOSWGGQATNVFVNMEEDFMKPVISIVDELLEAG DNA40370 361 INVTVYNGOLDLIVDTMGOEAWVRKLKWPELPKFSOLKWKALYSDPKSLETSAFVKSYKN P AAY05768 361 INVTVYNGOLDLIVDTMGOEAWVRKLKWPELPKFSOLKWKALYSDPKSLETSAFVKSYKN DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTOOE ******* P AAY05768 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE >12 CAC51169.1 unnamed protein product - Homo sapiens (452 aa) [1 seg] Score \approx 2382 (922 bits), Expect = 0.0 Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452 DNA40370 1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN *************** CAC51169.1 1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN DNA40370 61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT ***************** 61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT CAC51169.1 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL DNA40370 *************** CAC51169.1 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL DNA40370 181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEOVLNA ************* CAC51169.1 181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA DNA40370 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH ******************** CAC51169.1 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTOSHLVCLCORH DNA40370 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG **************** CAC51169.1 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG DNA40370 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN ******************** CAC51169.1 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN

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DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               *********
 CAC51169.1 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>13 AAG16692.1 serine carboxypeptidase 1 precursor protein - Homo sapiens (452
aa) [1 seg]
 Score = 2382 (922 bits), Expect = 0.0
 Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
               ********************
 AAG16692.1
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
           61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
               ****************
AAG16692.1
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
  DNA40370 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
               ****************
 AAG16692.1 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
  DNA40370 181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
                   *******************
AAG16692.1 181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
  DNA40370 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTOSHLVCLCORH
AAG16692.1 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTOSHLVCLCORH
  DNA40370 301 VRHLORDALSOLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG
AAG16692.1 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
  DNA40370 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
AAG16692.1 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               *******
AAG16692.1 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>14 BAB55069.1 unnamed protein product - Homo sapiens (452 aa) [1 seg]
Score = 2382 (922 \text{ bits}), Expect = 0.0
Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
                  *****************
BAB55069.1
            1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
            61 SCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLOAASLLFVDNPVGT
               *****************
BAB55069.1
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
  DNA40370 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
               *******************
BAB55069.1 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
```

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DNA40370 181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
 BAB55069.1 181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
   DNA40370 241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
 BAB55069.1
           241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
   DNA40370 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
 BAB55069.1 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
   DNA40370 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
               *********************
 BAB55069.1
           361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               ·*********************
 BAB55069.1 421 LAFYWILKAGHMVPSDOGDMALKMMRLVTOOE
>15 NP_067639.1 serine carboxypeptidase 1 precursor protein - Homo sapiens (452
aa) [1 seq]
 Score = 2382 (922 \text{ bits}), Expect = 0.0
 Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
               ****************
NP 067639.1
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
               ******************
NP 067639.1
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
  DNA40370
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
NP 067639.1
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
  DNA40370
           181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
               ****************
NP 067639.1
           181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
  DNA40370
           241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
                ****************
NP 067639.1
           241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
  DNA40370
           301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
                ****************
NP 067639.1
           301 VRHLQRDALSQLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG
           361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370
               *******************
NP_067639.1 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               **********
NP_067639.1 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
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>16 RISC HUMAN Retinoid-inducible serine carboxypeptidase precursor
/pid=AAG16692.1 - homo sapiens (452 aa) [1 seg]
 Score = 2382 (922 \text{ bits}), Expect = 0.0
 Identities = 452/452 (100%), Positives = 452/452 (100%), at 1,1-452,452
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
 RISC HUMAN
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
             61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
 RISC HUMAN
  DNA40370
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
 RISC HUMAN
  DNA40370
            181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
 RISC HUMAN
           181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
  DNA40370
           241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
 RISC HUMAN
           241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTOSHLVCLCORH
  DNA40370
           301 VRHLORDALSOLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG
                *****************
 RISC HUMAN
           301 VRHLORDALSOLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG
  DNA40370
           361 INVTVYNGOLDLIVDTMGOEAWVRKLKWPELPKFSOLKWKALYSDPKSLETSAFVKSYKN
                *************
RISC HUMAN
           361 INVTVYNGOLDLIVDTMGOEAWVRKLKWPELPKFSOLKWKALYSDPKSLETSAFVKSYKN
  DNA40370
            421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               ********
RISC_HUMAN 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>17 P_AAU96225 Human secreted protein, SEQ ID No 127 - Homo sapiens. (452 aa) [1
seg]
Score \approx 2372 (918 bits), Expect = 0.0
Identities = 451/452 (99%), Positives = 451/452 (99%), at 1,1-452,452
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
               ***************
P AAU96225
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
  DNA40370
            61 SCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
                ******* ****************
P AAU96225
            61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKLRKTTWLQAASLLFVDNPVGT
  DNA40370
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
P AAU96225
           121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFY1FSESYGGKMAAGIGLEL
  DNA40370
           181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
                ********************
P AAU96225
           181 YKAIORGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
```

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DNA40370 241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
 P AAU96225 241 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCORH
   DNA40370 301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
           301 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVISIVDELLEAG
 P AAU96225
   DNA40370 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
 P AAU96225 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
   DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
 P AAU96225 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>18 P AAB41675 Human ORFX ORF1439 polypeptide sequence SEQ ID NO:2878 - Homo
(451 aa) [1 seg]
 Score = 2306 (892 bits), Expect = 0.0
 Identities = 439/452 (97%), Positives = 444/452 (98%), Gaps = 1/452 (0%), at
1,1-452,451
  DNA40370
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATN
 P AAB41675
             1 MELALRRSPVPRWLLLLPLLLGLNAGAVIDWPTEEGKEVWDYVTVRKDAYMFWWLYYATT
   DNA40370 61 SCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
                 *************
 P AAB41675
            61 PART-SELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAASLLFVDNPVGT
  DNA40370 121 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGGKMAAGIGLEL
                *******************
 P AAB41675
            120 GFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFOTVPFYIFSESYGGKMAAGIGLEL
   DNA40370 181 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
                *****************
 P AAB41675
            180 YKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEVSKVAEQVLNA
  DNA40370 241 VNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
 P AAB41675 240 VNKGLYREATELWGKAEMIIEONTDGVNFYNILTKSTPTSTMESSLEFTQSHLVCLCQRH
  DNA40370 301 VRHLORDALSOLMNGPIRKKLKIIPEDOSWGGOATNVFVNMEEDFMKPVISIVDELLEAG
 P AAB41675 300 VRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVIDIVDTLLEAG
  DNA40370 361 INVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLETSAFVKSYKN
                ****************************
P_AAB41675 360 VNVTVYNGQLDLIVDTIGQEAWVRKLKWPELSRFNQLKWKALYSDPKSLETSAFVKSYKN
  DNA40370 421 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
               *********
P AAB41675 420 LAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
>19 AAG39285.1 MSTP034 - Homo sapiens (402 aa) [1 seg]
Score = 2116 (819 bits), Expect = 0.0
```

Identities = 402/402 (100%), Positives = 402/402 (100%), at 51,1-452,402

DNA40370	51 MFWWLYYATNSCKNFSELPLVMWLOGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAAS
DNA40370	51 MtwmriiainocureperentimuQaasosiaranraataraa****************************
AAG39285.1	1 MFWWLYYATNSCKNFSELPLVMWLQGGPGGSSTGFGNFEEIGPLDSDLKPRKTTWLQAAS
DNA40370	111 LLFVDNPVGTGFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGG

AAG39285.1	61 LLFVDNPVGTGFSYVNGSGAYAKDLAMVASDMMVLLKTFFSCHKEFQTVPFYIFSESYGG
DNA40370	171 KMAAGIGLELYKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEV

AAG39285.1	121 KMAAGIGLELYKAIQRGTIKCNFAGVALGDSWISPVDSVLSWGPYLYSMSLLEDKGLAEV
DNA40370	231 SKVAEQVLNAVNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQ

AAG39285.1	181 SKVAEQVLNAVNKGLYREATELWGKAEMIIEQNTDGVNFYNILTKSTPTSTMESSLEFTQ
DNA40370	291 SHLVCLCQRHVRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVI

AAG39285.1	241 SHLVCLCQRHVRHLQRDALSQLMNGPIRKKLKIIPEDQSWGGQATNVFVNMEEDFMKPVI
DNA40370	351 SIVDELLEAGINVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLE

AAG39285.1	301 SIVDELLEAGINVTVYNGQLDLIVDTMGQEAWVRKLKWPELPKFSQLKWKALYSDPKSLE
DNA40370	411 TSAFVKSYKNLAFYWILKAGHMVPSDQGDMALKMMRLVTQQE
AAG39285.1	**************************************
AAG39285.1	361 TSAFVKSYKNLAFYWILKAGHMVPSDQGDMALKMMRLVTQQE

Dayhoff Protein Database (Rel 75, Feb 2003)

P ABB84842 Human PRO302 protein sequence SEQ ID NO:52 - Homo sapiens. Length: 452 aa Accession: P_ABB84842; Species: Homo sapiens. Keywords: Human; angiogenesis; cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; angiogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; rheumatoid arthritis; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; patent; GENESEQ patentdb. Patent number: WO200200690-A2. Publication date: 03-JAN-2002. Filing date: 20-JUN-2001; 2001WO-US19692. Priority: 23-JUN-2000; 2000US-213637P. 20-JUL-2000; 2000US-219556P. 25-JUL-2000; 2000US-220624P.30-MAY-2001; 2001WO-US17443. 01-JUN-2001; 2001WO-US17800. plus 32 more dates. Assignee: (GETH) GENENTECH INC. Inventors: Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF; Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W; Cross reference: WPI; 2002-090516/12. N-PSDB; ABL88097. Title: One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -Patent format: Claim 11; Fig 52; 565pp; English. Comment: ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention. Database: GENESEQ patent database.

P_ABB95448 Human angiogenesis related protein PRO302 SEQ ID NO: 52 - Homo sapiens.

Length: 452 aa

Accession: P_ABB95448; Species: Homo sapiens.

Keywords: Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer; atherosclerosis; cardiac hypertrophy; gene therapy; endothelial disorder; cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; patent; GENESEQ patentdb.

Patent number: WO200208284-A2. Publication date: 31-JAN-2002. Filing date: 09-JUL-2001; 2001WO-US21735. Priority: 20-JUL-2000; 2000US-219556P. 25-JUL-2000; 2000US-220624P. 25-JUL-2000; 2000US-220664P.20-JUN-2001; 2001WO-US19692. 28-JUN-2001; 2001WO-US00000. plus 34 more dates. Assignee: (GETH) GENENTECH INC. (BAKE/) BAKER K P. (FERR/) FERRARA N. (GERB/) GERBER H. (GERR/) GERRITSEN M E. (GODD/) GODDARD A. (GODO/) GODOWSKI P J. (GURN/) GURNEY A L. (HILL/) HILLAN K J. (MARS/) MARSTERS S A. (PANJ/) PAN J. (PAON/) PAONI N F. (STEP/) STEPHAN J F. (WATA/) WATANABE C K. (WILL/) WILLIAMS P M. (WOOD/) WOOD W I. Inventors: Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF; Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W; Cross reference: WPI; 2002-171999/22. N-PSDB; ABL95586. Title: One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -Patent format: Claim 11; Fig 52; 567pp; English. Comment: The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a PRO protein of the invention. Database: GENESEQ patent database. P ABP65102 Hypoxia-induced protein #28 - Homo sapiens. Length: 452 aa Accession: P_ABP65102; Species: Homo sapiens. Keywords: Cytostatic; vasotropic; tranquiliser; antiatherosclerotic; gene therapy; antiinflammatory; vulnerary; gynecological; ophthalmological; vaccine; hypoxia; tumourigenesis; angiogenesis; apoptosis; cancer; ischaemic condition; reperfusion injury; retinopathy; neonatal stress; preeclapmsia; atherosclerosis; inflammatory condition; wound healing; inflammation; erythropoiesis; hair loss; human; patent; GENESEQ patentdb. Patent number: WO200246465-A2. Publication date: 13-JUN-2002. Filing date: 10-DEC-2001; 2001WO-GB05458. Priority: 08-DEC-2000; 2000GB-0030076. 08-FEB-2001; 2001GB-0003156. 25-OCT-2001; 2001GB-0025666. Assignee: (OXFO-) OXFORD BIOMEDICA UK LTD. Inventors: White J, Mundy CR, Ward NR, Krige D, Kingsman SM, Harris RA; Raymer WN; Cross reference: WPI; 2002-627238/67. Title: Identifying a gene involved in disease for treating hypoxia-regulated conditions, comprises comparing the transcriptome/proteome of two cell types under different conditions and identifying a differentially regulated gene -Patent format: Claim 13; Page 305; 538pp; English.

Comment: The present invention relates to methods for identifying genes and proteins that are implicated in a specific disease or physiological

condition. The method comprises comparing the transcriptome/proteome of a specialised cell type implicated in a disease or condition with that of a second specialised cell type, under two experimental conditions, and identifying a gene that is differentially regulated in the two specialised cell types under experimental conditions. ABV77873-ABV78116 and ABP65061-ABP65257 were identified using the methods of the invention. The coding sequences and proteins are useful for treating a disease in a patient, for manufacture of a medicament for treating hypoxia-regulated conditions, and for regulating tumourigenesis, angiogenesis, apoptosis, biological response to hypoxia conditions, or hypoxic-associated pathology in a patient. The coding sequences and proteins are also useful for monitoring the therapeutic treatment of a disease or physiological condition, such as cancer, ischaemic conditions, reperfusion injury, retinopathy, neonatal stress, preeclapmsia, atherosclerosis, inflammatory conditions, wound healing, inflammation, erythropoiesis or hair loss.

Database: GENESEQ patent database.

P_ABB99215 Human retinoid inducible serine carboxypeptidase - Homo sapiens.

Length: 452 aa

Accession: P_ABB99215; Species: Homo sapiens.

Keywords: Serine carboxypeptidase; mammalian; RISC; antihypertensive; retinoid-inducible serine carboxypeptidase; antiarteriosclerotic; nephrotropic; antiasthmatic; vasotropic; gene therapy; vascular disease; vascular hyperplasia; atherosclerosis; restenosis; glomerulonephritis; hypertension; obstructive bladder disease; tubulosclerosis; asthma; interstitial tubular disease; human; patent; GENESEQ patentdb.

Patent number: WO200268599-A2. Publication date: 06-SEP-2002.

Filing date: 22-FEB-2002; 2002WO-US05560.

Priority: 22-FEB-2001; 2001US-271183P. 23-MAY-2001; 2001US-293097P.

Assignee: (UYRP) UNIV ROCHESTER.

Inventors: Miano JM, Streb JW, Chen J;

Cross reference: WPI; 2002-713371/77. N-PSDB; ABV72656.

Title: New retinoid-inducible serine carboxypeptidase proteins and nucleic acids, useful for detecting or treating vascular diseases, e.g. vascular hyperplasia, atherosclerosis, asthma, glomerulonephritis, hypertension -

Patent format: Claim 39; Page 20-21; 129pp; English.

Comment: The invention relates to a novel mammalian retinoid-inducible serine carboxypeptidase (RISC) protein or polypeptide. The proteins of the invention have antiarteriosclerotic, antihypertensive, nephrotropic, antiasthmatic, and vasotropic activity. The polynucleotides of the invention may have a use in gene therapy. The retinoid-inducible serine carboxypeptidase protein and the nucleic acid molecule are useful in detecting, preventing or treating vascular diseases or disorders, e.g. vascular hyperplasia, atherosclerosis, restenosis, glomerulonephritis, hypertension, obstructive bladder disease, tubulosclerosis, asthma or interstitial tubular disease, in inhibiting smooth muscle cell growth and inhibiting the activity of extracellular regulated kinase. The transgenic animal is useful in screening and identifying agents that induce or suppress the function of the retinoid-inducible genes. The sequence represents the human RISC of

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the invention.
73-82/Binding-site
/label= Serine_carboxypeptidase_binding_site/
163-170/Domain
/label= First catalytic domain/
365-373/Domain
/label= Second catalytic_domain/
421-437/Domain
/label= Third catalytic domain/
Database: GENESEQ patent database.
P AAB80255 Human PRO302 protein - Homo sapiens.
Length: 452 aa
Accession: P AAB80255;
Species: Homo sapiens.
Keywords: Human; PRO; dermatological; antipsoriatic; cytostatic;
      antiinflammatory; antiparkinsonian nootropic; neuroprotective;
      vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic;
      antirheumatic; cancer; antiarthritic; antiinfertility;
      antidiabetic; antiviral; diabetes; ophthalmological; gene therapy;
      skin disease; gastrointestinal disorder; ischaemia; inflammation;
      patent; GENESEQ patentdb.
Patent number: WO200104311-A1.
Publication date: 18-JAN-2001.
Filing date: 22-FEB-2000; 2000WO-US04414.
Priority: 07-JUL-1999; 99US-0143048. 26-JUL-1999; 99US-0145698.
      28-JUL-1999; 99US-0146222. 08-SEP-1999; 99WO-US20594. 13-SEP-1999;
      99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999; 99WO-US21547.
      05-OCT-1999; 99WO-US23089. 29-NOV-1999; 99WO-US28214. 30-NOV-1999;
      99WO-US28313. 16-DEC-1999; 99WO-US30095. 20-DEC-1999; 99WO-US30911.
      20-DEC-1999; 99WO-US30999. 05-JAN-2000; 99WO-US00219.
Assignee: (GETH ) GENENTECH INC.
Inventors: Ashkenazi AJ, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
      Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
      Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ; Mather
      JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood
Cross reference: WPI; 2001-081051/09. N-PSDB; AAF72416.
Title: Sixty one nucleic acids encoding PRO polypeptides which are useful
      in the treatment of skin diseases (e.g. psoriasis), cancers (e.g.
      lung squamous cell carcinoma) and neurodegenerative diseases (e.g.
      Alzheimer's disease) -
Patent format: Claim 1; Fig 90; 393pp; English.
Comment: The present sequence is one of sixty one novel secreted and
    transmembrane PRO polypeptides. The PRO polypeptides are useful for
      treating skin diseases (e.g. psoriasis), cancers (e.g. lung
      squamous cell carcinoma), gastrointestinal disorders (e.g.
      enterocolitis), neurodegenerative diseases (e.g. Alzheimer's
      disease, Parkinson's disease), wound repair, cardiovascular
      disorders (e.g. endometrial bleeding angiogenesis, ischaemias such
      as coronary ischaemia, atherosclerosis), inflammatory disorders
      (e.g. asthma, rheumatoid arthritis, multiple sclerosis),
      infertility, AIDS and diabetes and retinal disorders such as
      retinitis pigmentosum. The PRO nucleic acids have applications in
      molecular biology, including use as hybridization probes, and in
      chromosome and gene mapping.
Database: GENESEQ patent database.
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P AAB20341 Human PRO302 - Homo sapiens.
 Length: 452 aa
 Accession: P_AAB20341;
 Species: Homo sapiens.
 Keywords: PRO302; vitellogenic carboxypeptidase homologue; human;
       angiogenesis; cardiovascularisation; trauma; wound; cancer;
       atherosclerosis; cardiac hypertrophy; macular degeneration;
       cardiant; antiangiogenic; antiarteriosclerotic; hypotensive;
       antirheumatic; antiarthritic; antiinflammatory; vulnerary;
       antitumour; diagnosis; therapy; patent; GENESEQ patentdb.
 Patent number: WO200119987-A1.
 Publication date: 22-MAR-2001.
 Filing date: 29-NOV-1999; 99WO-US28214.
 Priority: 13-SEP-1999; 99WO-US20944. 15-SEP-1999; 99WO-US21090.
Assignee: (GETH ) GENENTECH INC.
 Inventors: Fong S, Gerritsen ME, Goddard A, Gurney AL, Hillan KJ; Williams
       PM, Wood WI;
 Cross reference: WPI; 2001-235264/24. N-PSDB; AAF30502.
 Title: Composition comprising a PRO230, PRO216 or PRO302 polypeptide,
       agonist or antagonist for promoting or inhibiting angiogenesis
       and/or cardiovascularisation in mammals -
 Patent format: Claim 55; Fig 6; 141pp; English.
 Comment: The present sequence is that of human PRO302, a novel secreted
       protein (51 kDa, pI 5.74) that is a homologue of vitellogenic
       carboxypeptidase. The sequence is predicted from isolated PRO302
       cDNA (see AAF30502). PRO302 is 1 of 3 novel PRO polypeptides of the
       invention. PRO230, PRO216 and PRO302 polynucleotides and
       polypeptides, recombinant retroviral particles, ex vivo producer
       cells, expression vectors, host cells, and methods of recombinant
       production are provided, as well as antibodies, agonists and
       antagonists. The polynucleotides, polypeptides, agonists and
       antagonists are useful for treating or diagnosing a cardiovascular,
       endothelial or angiogenic disorder in a mammal, e.g. cardiac
       hypertrophy, trauma, cancer, age-related macular degeneration (all
       claimed), atherosclerosis, hypertension, arterial restenosis,
       rheumatoid arthritis, angina, myocardial infarction,
       thrombophlebitis and lymphangitis. The polypeptides, agonists and
       antagonists are also used in claimed methods of stimulating or
       inhibiting endothelial cell growth.
1-25/Peptide
/label= Signal_peptide/
26-452/Protein
/label= Mature_protein/
64-68/Modified-site
/note= Asn is N-glycosylated/
126-130/Modified-site
/note= Asn is N-glycosylated/
362-366/Modified-site
/note= Asn is N-qlycosylated/
204-208/Modified-site
/note= O-phosphorylated by casein kinase II/
220-224/Modified-site
/note= O-phosphorylated by casein kinase II/
280-284/Modified-site
/note= O-phosphorylated by casein kinase II/
284-288/Modified-site
/note= O-phosphorylated by casein kinase II/
351-355/Modified-site
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/note= O-phosphorylated by casein kinase II/
449-453/Modified-site
/note= O-phosphorylated by casein kinase II/
101-105/Modified-site
/note= O-phosphorylated by cAMP- and cGMP-/
dependent protein kinase/
22-28/Modified-site
/note= N-myristoylated/
76-82/Modified-site
/note= N-myristoylated/
79-85/Modified-site
/note= N-myristoylated/
80-86/Modified-site
/note= N-myristoylated/
119-125/Modified-site
/note= N-myristoylated/
168-175/Modified-site
/note= N-myristoylated/
187-193/Modified-site
/note= N-myristoylated/
195-201/Modified-site
/note= N-myristoylated/
331-337/Modified-site
/note= N-myristoylated/
332-338/Modified-site
/note= N-myristoylated/
360-366/Modified-site
/note= N-myristoylated/
Database: GENESEQ patent database.
P_AAB93913 Human protein sequence SEQ ID NO:13882 - Homo sapiens.
Length: 452 aa
Accession: P AAB93913;
Species: Homo sapiens.
Keywords: Human; primer; detection; diagnosis; antisense therapy; gene
      therapy; patent; GENESEQ patentdb.
Patent number: EP1074617-A2.
Publication date: 07-FEB-2001.
Filing date: 28-JUL-2000; 2000EP-0116126.
Priority: 29-JUL-1999; 99JP-0248036. 27-AUG-1999; 99JP-0300253.
      11-JAN-2000; 2000JP-0118776. 02-MAY-2000; 2000JP-0183767.
      09-JUN-2000; 2000JP-0241899.
Assignee: (HELI-) HELIX RES INST.
Inventors: Ota T, Isoqai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
      Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
Cross reference: WPI; 2001-318749/34.
Title: Primer sets for synthesizing polynucleotides, particularly the 5602
      full-length cDNAs defined in the specification, and for the
      detection and/or diagnosis of the abnormality of the proteins
      encoded by the full-length cDNAs -
Patent format: Claim 8; SEQ ID 13882; 2537pp + CD ROM; English.
Comment: The present invention describes primer sets for synthesising 5602
      full-length cDNAs defined in the specification. Where a primer set
      comprises: (a) an oligo-dT primer and an oligonucleotide
      complementary to the complementary strand of a polynucleotide which
      comprises one of the 5602 nucleotide sequences defined in the
      specification, where the oligonucleotide comprises at least 15
      nucleotides; or (b) a combination of an oligonucleotide comprising
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a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'-end sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in gene therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632 represent oligonucleotides, all of which are used in the exemplification of the present invention.

Database: GENESEQ patent database.

P_AAE06595 Human protein having hydrophobic domain, HP03959 - Homo sapiens.

Length: 452 aa

Accession: P_AAE06595; Species: Homo sapiens.

Keywords: Human; hydrophobic domain; gene therapy; nutritional supplement; cell proliferation; immunomodulatory; autoimmune disorder; antimicrobial; multiple sclerosis; rheumatoid arthritis; insulin-dependent diabetes; haematopoiesis; tissue growth activity; Parkinson's disease; cytostatic; Huntington's disease; Alzheimer's disease; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour growth inhibitor; anabolic; contraceptive; antiinfertility; antiinflammatory; patent; GENESEQ patentdb.

Patent number: WO200149728-A2.

Publication date: 12-JUL-2001.

Filing date: 28-DEC-2000; 2000WO-JP09359.

Priority: 06-JAN-2000; 2000JP-0000585. 06-JAN-2000; 2000JP-0000588.

11-JAN-2000; 2000JP-0002299. 03-FEB-2000; 2000JP-0026862.

03-MAR-2000; 2000JP-0058367.

Assignee: (PROT-) PROTEGENE INC. (SAGA) SAGAMI CHEM RES CENT.

Inventors: Kato S, Kimura T;

Cross reference: WPI; 2001-418355/44. N-PSDB; AAD12590.

Title: Human proteins with hydrophobic domains and the nucleic acids encoding them, useful for preventing diagnosing and treating e.g. cancer, Alzheimer's and inflammation -

Patent format: Claim 1; Page 368-370; 563pp; English.

Comment: The present sequence is human protein with hydrophobic domain, HP03959. The polynucleotide and polypeptide of the invention may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The polynucleotides may be used to produce the polypeptide, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. The polynucleotides and its complementary sequences may also be used as DNA probes in diagnostic assays and also used in gene therapy. The polypeptides may also be used as antigens in the production of antibodies and in assays to identify modulators of polypeptide expression and activity. The polypeptides and nucleic acids may be used as nutritional supplements, to modulate cytokine and cell proliferation activity, to modulate

immune stimulation or suppression (e.g. for the treatment of microbial infections and autoimmune disorders such as multiple sclerosis, rheumatoid arthritis and insulin-dependent diabetes), to modulate haematopoiesis, to modulate tissue growth activity (e.g. for the treatment of Parkinson's disease, Huntington's disease and Alzheimer's disease), to modulate activin and inhibin activity (e.g. for controlling fertility), to modulate chemotactic and chemokinetic activity, to modulate haemostatic and thrombolytic activity, to modulate receptor ligand activity, to modulate inflammation and to inhibit tumour growth.

1-27/Peptide

/label= Signal peptide/

28-452/Protein

/note= Mature human protein with hydrophobic domain/

Database: GENESEQ patent database.

P_AAY88378 PRO302, vitellogenic carboxypeptidase homologue amino acid sequence - Homo sapiens.

Length: 452 aa

Accession: P_AAY88378; Species: Homo sapiens.

Keywords: Human; PRO302; Vitellogenic carboxypeptidase; cardiant; angiogenic; cytostatic; ophthalmic; antiproliferative activity; cardiovascular; endothelial; angiogenic disorder; cardiac hypertrophy; trauma; cancer; myocardial infarction; age-related macular degeneration; patent; GENESEQ patentdb.

Patent number: WO200015792-A2. Publication date: 23-MAR-2000.

Filian date: 25-MAR-2000.

Filing date: 13-SEP-1999; 99WO-US20944.

Priority: 14-SEP-1998; 98US-0100262. 14-SEP-1998; 98WO-US19177.

Assignee: (GETH) GENENTECH INC.

Inventors: Fong S, Gerritsen ME, Goddard A, Gurney AL, Hillan KJ; Williams
PM, Wood WI;

Cross reference: WPI; 2000-271431/23. N-PSDB; AAA13199.

Title: A composition comprising PRO230, PRO216 or PRO302 polypeptides, agonists or antagonists useful for promotion or inhibition of cardiovascularisation, angiogenesis or endothelialisation in mammals -

Patent format: Example 3; Fig 6; 135pp; English.

Comment: This sequence represents the human PRO302 amino acid sequence. PRO302 is a human vitellogenic carboxypeptidase homologue. The invention relates to a composition comprising a PRO230 (tubulointerstitial nephritis antigen homologue), PRO216 (osteomodulin/fibromodulin homologue) or PRO302 (vitellogenic carboxypeptidase homologue) polypeptide, or an agonist or antagonist of these. Also included in the invention is a method for preparing the composition, agonists and antagonists of PRO230, PRO216 or PRO302, and antibodies that bind to a PRO230, PRO216 or PRO302 polypeptides. The composition of the invention has cardiant, angiogenic, cytostatic, ophthalmic, and antiproliferative activity. Analysis of the level of expression of a gene encoding a PRO230, PRO216 or PRO302 polypeptide or detecting the presence/absence of the polypeptide is useful for diagnosis of cardiovascular, endothelial or angiogenic disorders in mammals. Anti-PRO230, PRO216 or PRO302 antibodies are useful in these diagnostic methods. The PRO230, PRO216 or PRO302 polypeptides (and their coding sequences), agonists and antagonists are useful for treatment of cardiovascular, endothelial or angiogenic disorders, especially

cardiac hypertrophy (especially characterized by presence of an elevated level of PGF-2alpha), trauma or cancer, myocardial infarction or age-related macular degeneration. In particular, PRO216, an agonist of PRO216, an antagonist of PRO230, PRO216 or PR302 or an anti-PRO216 antibody is useful for inhibition of endothelial cell growth in a mammal. Endothelial cell growth can be stimulated by administration of PRO230, a PRO230 agonist or antagonist or an anti-PRO230 antibody. Additionally, an anti-PRO302 antibody can inhibit angiogenesis induced by PRO302 in a mammal.

Database: GENESEQ patent database.

P AAY13387 Amino acid sequence of protein PRO302 - Homo sapiens.

Length: 452 aa

Accession: P_AAY13387; Species: Homo sapiens.

Keywords: Secreted protein; transmembrane protein; human; enterocolitis; Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; skin disease; cell growth; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic; wound healing; tissue repair; patent; GENESEQ patentdb.

Patent number: WO9914328-A2.

Publication date: 25-MAR-1999.

Filing date: 16-SEP-1998; 98WO-US19330.

Priority: 25-NOV-1997; 97US-0066840. 17-SEP-1997; 97US-0059113.

17-SEP-1997; 97US-0059115.24-NOV-1997; 97US-0066511. 24-NOV-1997;

97US-0066453. plus 47 more dates.

Assignee: (GETH) GENENTECH INC.

Inventors: Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;

Cross reference: WPI; 1999-229533/19. N-PSDB; AAX52258.

Title: New isolated human genes and polypeptides used in, e.g. treatment of gastrointestinal ulceration

Patent format: Claim 12; Fig 90; 320pp; English.

Comment: AAY13344-403 represent secreted and transmembrane human proteins. The cDNA sequences are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of genital tract.

Database: GENESEQ patent database.

P AAY05768 Human PRO216 (vitellogenic carboxypeptidase homologue) - Homo Length: 452 aa Accession: P AAY05768; Species: Homo sapiens. Keywords: PRO302; vitellogenic carboxypeptidase; human; angiogenesis; cardiovascularisation; wound healing; cancer; atherosclerosis; cardiac hypertrophy; myocardial infarction; antiangiogenic; antitumour; tissue regeneration; pulmonary fibrosis; neurological disease; macular degeneration; diagnosis; therapy; patent; GENESEQ patentdb. Patent number: WO9914234-A2. Publication date: 25-MAR-1999. Filing date: 14-SEP-1998; 98WO-US19177. Priority: 24-NOV-1997; 97US-0066772. 17-SEP-1997; 97US-0059117. 27-OCT-1997; 97US-0063329. Assignee: (GETH) GENENTECH INC. Inventors: Fong S, Gerritsen ME, Goddard A, Gurney AL, Hillan K; Williams PM, Woodwi; Cross reference: WPI; 1999-254381/21. N-PSDB; AAX25445. Title: Composition containing human polypeptides with anti-angiogenic activity Patent format: Example 1; Fig 9; 102pp; English. Comment: The present sequence represents human PRO302, identified as a vitellogenic carboxypeptidase homologue. The sequence was deduced from cDNA clone UNQ265 (DNA40370-1217, ATCC 209485, see AAX25445). Compositions containing PRO302, PRO216 (human osteomodulin, see AAY05767) or PRO230 in admixture with a carrier are claimed. The compositions are used to treat or prevent a wide range of cardiovascular, endothelial and angiogenic disorders (claimed), specifically cardiac hypertrophy (especially where associated with elevated levels of prostaglandin F2 alpha or induced by myocardial infarction), trauma (wounds, burns, or tissue regeneration more generally, including neurological disease), and cancer. Antagonists may be used similarly, also to treat age-related macular degeneration (or other angiogenic retinal disorders) and to prevent excessive growth of connective tissue during wound healing or in pulmonary fibrosis. 1-25/Peptide /note= signal peptide/ 26-452/Protein /note= mature protein/ 64/Modified-site /note= N-glycosylated/ 126/Modified-site /note= N-glycosylated/ 362/Modified-site /note= N-glycosylated/ Database: GENESEQ patent database.

Species: Homo sapiens (human)
Kato,S. and Kimura,T., Patent: WO 0149728-A 85 12-JUL-2001; Protegene Inc.
(JP); SAGAMI CHEMICAL RESEARCH CENTER (JP) Title: Human proteins having hydrophobic domains and dnas encoding these proteins

CAC51169.1 unnamed protein product - Homo sapiens

Length: 452 aa

Locus: AX191563 Accession: AX191563

Cross-references: taxon:9606; GI:15209750; AX191563 1

Database: GBTRANS

AAG16692.1 serine carboxypeptidase 1 precursor protein - Homo sapiens

Length: 452 aa

Species: Homo sapiens (human)

Cho, J.-J. and Baik, H.-H., Submitted (26-JUN-2000) Microbiology, Kyung Hee University, Hoeki 1, Seoul 130-701, Korea Title: Direct Submission

Gene: HSCP1 Locus: AF282618 Accession: AF282618

Cross-references: taxon:9606; GI:10312169; AF282618 1

Database: GBTRANS

BAB55069.1 unnamed protein product - Homo sapiens

Length: 452 aa

Species: Homo sapiens (human)

Isogai, T. and Otsuki, T., Submitted (10-MAY-2001) Takao Isogai, Helix Research Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,

Tel:81-438-52-3975, Fax:81-438-52-3986) Title: Direct Submission

Locus: AK027373 Accession: AK027373

Cross-references: taxon:9606; GI:14042006; AK027373 1

Database: GBTRANS

RISC_HUMAN Retinoid-inducible serine carboxypeptidase precursor /pid=AAG16692.1 - homo sapiens

Length: 452 aa

Species: Homo sapiens (Human).

Accession: Q9HB40; EMBL; AF282618; AAG16692.1. EMBL; AK027373; BAB55069.1. MEROPS; S10.013; -. InterPro; IPR000379; Ser estrs site. InterPro; IPR001563; Serine carbpept. Pfam; PF00450; serine carbpept; 1. PRINTS; PR00724; CRBOXYPTASEC. ProDom; PD001189; Serine carbpept; PROSITE; PS00131; CARBOXYPEPT SER SER; 1. PROSITE; PS00560; CARBOXYPEPT SER HIS; FALSE NEG.

Cho J.-J., Baik H.-H., Submitted (jun-2000) to the Embl/genbank/ddbj databases. (ref. 1: sequence from n.a.) Title: "Cloning of novel serine carboxypeptidase precursor."

Isogai T., Ota T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y., Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H., Wagatsuma M., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S., Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K., Yamamoto J., Wakamatsu A., Nakamura Y., Nagahari K., Masuho Y., Ninomiya K., Iwayanagi T., Submitted (may-2001) to the Embl/genbank/ddbj databases. (ref. 2: sequence from n.a.

tissue=mammary gland;) Title: "NEDO human cDNA sequencing project."

Keywords: hydrolase; carboxypeptidase; glycoprotein; signal.

Taxid: tx:9606

Gene name: RISC OR SCP1.

1-26/Domain: Signal Potential.

27-452/Domain: Retinoid-Inducible Serine Carboxypeptidase.

167/Site: Act_site By Similarity. 371/Site: Act site By Similarity.

431/Site: Act_site By Similarity.

64/Site: Carbohyd N-Linked (glcnac...) (potential).
126/Site: Carbohyd N-Linked (glcnac...) (potential).
362/Site: Carbohyd N-Linked (glcnac...) (potential).
Database: Swissprot (SPROT), Release 40 (Jan 11, 2003)

P_AAU96225 Human secreted protein, SEQ ID No 127 - Homo sapiens.
Length: 452 aa
Accession: P_AAU96225;
Species: Homo sapiens.
Keywords: Human; secreted protein; autoimmune disease; rheumatoid

Keywords: Human; secreted protein; autoimmune disease; rheumatoid arthritis; hyperproliferative disorder; neoplasm; breast; liver; ischaemia; cardiovascular disorder; cardiac arrest; cerebrovascular disorder; angiogenesis; nervous system disorder; Alzheimer's disease; infection; corneal infection; wound healing; ocular disorder; skin aging; sunburn; epithelial cell proliferation; organ transplantation; food additive; food storage; patent; GENESEQ patentdb.

Patent number: WO200224721-A1. Publication date: 28-MAR-2002.

Filing date: 09-JAN-2001; 2001WO-US00544. Priority: 20-SEP-2000; 2000US-234211P. Assignee: (HUMA-) HUMAN GENOME SCI INC.

Inventors: Komatsoulis GA, Baker KP, Rosen CA, Birse CE, Soppet DR, Olsen
HS; Ni J, Fiscella M, Moore PA, Wei P, Ebner R, Duan DR, Shi Y;
Choi GH;

Cross reference: WPI; 2002-330012/36.

Title: Isolated nucleic acid molecule encoding a human secreted protein is used in preventing, treating or ameliorating a medical condition - Patent format: Disclosure; Page 13; 562pp; English.

Comment: The invention relates to an isolated nucleic acid molecule (I) encoding a human secreted protein (II). (I) and (II) are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. (I) and (II) are also used in diagnosing a pathological condition or susceptibility to a pathological condition. The antibodies to (II) can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked immunosorbent assays (ELISA). Disorders which are diagnosed or treated include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. corneal infection. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAU96165-AAU96237 represent human secreted protein sequences and related sequences used in expression of the secreted proteins as described in examples of the invention.

Database: GENESEQ patent database.

P_AAB41675 Human ORFX ORF1439 polypeptide sequence SEQ ID NO:2878 - Homo sapiens.

Length: 451 aa

Accession: P_AAB41675; Species: Homo sapiens. Keywords: Human; open

Keywords: Human; open reading frame; ORFX; detection; cytostatic; hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant; immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive; dermatological; immunosuppressive; antiinflammatory; antiviral; antibacterial; antifungal; antirheumatic; antithyroid; antianaemic; gene therapy; cancer; proliferative disorder; hypertension; neurodegenerative disorder; osteoarthritis; graft vs host disease; cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS; cholesterol ester storage; systemic lupus erythematosus; infection; severe combined immunodeficiency; malaria; autoimmune disorder; asthma; allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound; bone damage; cartilage damage; antiinflammatory disease; coagulation; thrombosis; contraceptive; patent; GENESEQ patentdb.

Patent number: WO200058473-A2. Publication date: 05-OCT-2000.

Filing date: 31-MAR-2000; 2000WO-US08621.

Priority: 31-MAR-1999; 99US-0127607. 02-APR-1999; 99US-0127636. 05-APR-1999; 99US-0127728. 30-MAR-2000; 2000US-0540763.

Assignee: (CURA-) CURAGEN CORP.

Inventors: Shimkets RA, Leach M;

Cross reference: WPI; 2000-602362/57. N-PSDB; AAC75884.

Title: Novel nucleic acids and peptides derived from open reading frame X, useful for treating e.g. cancers, proliferative disorders,

neurodegenerative disorders and cardiovascular disease -

Patent format: Claim 11; Page 2115-2116; 5507pp; English.

Comment: AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397, which represent the human ORFX open reading frames 1 to 3161. The ORFX sequences have activities such as: cytostatic; hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic; anticonvulsant; antiarthritic; immunosuppressant; immunostimulant; cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive; dermatological; immunosuppressive; antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The sequences can be used for determining the presence of or predisposition to, or preventing or treating pathological conditions associated with an ORFX-associated disorder. The nucleic acids can be used to express ORFX proteins in gene therapy vectors. The proteins and nucleic acids may be used to treat cancers, proliferative disorders, neurodegenerative disorders, osteoarthritis, graft vs host disease, cardiovascular disease, diabetes mellitus, hypertension, hypothyroidism, cholesterol ester storage, systemic lupus erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to enhance coagulation; to inhibit thrombosis; and as a contraceptive.

Database: GENESEQ patent database.

AAG39285.1 MSTP034 - Homo sapiens

Length: 402 aa

Species: Homo sapiens (human)

Liu, B., Liu, Y.Q., Wang, X.Y., Zhao, B., Sheng, H., Zhao, X.W., Liu, S., Xu, Y.Y., Ye, J., Song, L., Gao, Y., Zhang, C.L., Zhang, J., Wei, Y.J., Cao, H.Q., Zhao, Y., Liu, L.S., Ding, J.F., Gao, R.L., Wu, Q.Y., Qiang, B.Q., Yuan, J.G., Liew, C.C., Zhao, M.S. and Hui, R.T., Submitted (15-DEC-1998) Molecular Medical Center for Cardiovascular Disease, Cardiovascular Institute, CAMS & PUMC, 167, Bei Li Shi Lu, Beijing 100037, P.R. China Title: Direct Submission

Locus: AF113214 Accession: AF113214

Cross-references: taxon:9606; GI:11640576; AF113214_1

Database: GBTRANS

Tue Apr 1 15:57:45 2003 [BLASTA TAAD [Jan-08-2002], NCBI] Repeats masked (summary below) /home/glinda/vf/Legal/byeung/ss.DNA40370 (1650 bp)

P AAF30502

ss.DNA40370

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                                                                  1650 100
   2 P AAA13199
                 PRO302, vitellogenic carboxypeptidase h
                                                             1650
                                                                   1650 100
                                                                              0.0
   3 P AAX52258
                 Protein PRO302 cDNA clone DNA40370-1217
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                                                                   1650 100
   4 P AAX25445
                 Human PRO216 cDNA clone UNQ265.
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                                                                   1650 100
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   5 P_AAF72416
                 Human PRO302 cDNA.
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                                                                   1650 100
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   6 P ABL95586
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                                                                   1650 100
                                                                              0.0
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                                                                   1650 100
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  25 P AAH72787
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                    ************
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            1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
ss.DNA40370
            1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTG
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            1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTG
P AAA13199
ss.DNA40370
            1621 ATCAAAATAAAGGATGATAATAGATATTAA
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P_AAA13199
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>3 P_AAX52258 Protein PRO302 cDNA clone DNA40370-1217. DNA, PAT 25-JUN-1999
(1650 bp) [1 seg]
 Score = 1650 (3271 bits), Expect = 0.0
 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370
               1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
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P AAX52258
               1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss:DNA40370
              61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
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P AAX52258
              61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
ss.DNA40370
             121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
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P AAX52258
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ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
P_AAX52258	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
P_AAX52258	241	$\tt CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG$
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
P_AAX52258	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT ******************
P_AAX52258	361	${\tt AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT}$
ss.DNA40370		GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
P_AAX52258		GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370		TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA *********************************
P_AAX52258		${\tt TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA}$
ss.DNA40370		GGAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC *********************************
P_AAX52258 ss.DNA40370		GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
P AAX52258		AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG ********************************
ss.DNA40370		AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
P_AAX52258		CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG ********************************
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P_AAX52258		GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ****************************
ss.DNA40370		GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
P_AAX52258		ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC *********************************
ss.DNA40370		ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
P_AAX52258		**************************************
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P_AAX52258		**************************************
ss.DNA40370		
P_AAX52258	•	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC *******************************
ss.DNA40370		
//	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC

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P AAX52258
             1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
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P AAX52258
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P AAX52258
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P AAX52258
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P AAX52258
             1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
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P AAX52258
             1381 CAGCAAGAATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
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>4 P_AAX25445 Human PRO216 cDNA clone UNQ2,65. (1650 bp) [1 seg]
 Score = 1650 (3271 bits), Expect = 0.0
 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370
               {\tt 1} {\tt \ GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC}
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P_AAX25445
               1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss.DNA40370
              61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
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P_AAX25445
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ss.DNA40370
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P AAX25445
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ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	
P_AAX25445	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
P_AAX25445	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC	
P_AAX25445	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC	
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT	
P_AAX25445	. 361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT	
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC	
P_AAX25445	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC	
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA	
P_AAX25445	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA	
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC	
P_AAX25445	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC	
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG	
P_AAX25445	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG	
ss.DNA40370	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG	
P_AAX25445	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG	
ss.DNA40370	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCC	
P_AAX25445	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
ss.DNA40370	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
P_AAX25445	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	,
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
P_AAX25445	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
ss.DNA40370	901	CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	
P_AAX25445	901	CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC	
P_AAX25445	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC	
ss.DNA40370	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC	

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P AAX25445
           1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGAGTCTTCATGAAGCCAGTC
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P AAX25445
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P AAX25445
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P AAX25445
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P AAX25445
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P AAX25445
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>5 P_AAF72416 Human PRO302 cDNA. (1650 bp)/ [1 seg]
Score = 1650 (3271 bits), Expect = 0.0
 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370
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P AAF72416
              1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGCACTGCGGCGCTCTCCC
ss.DNA40370
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P AAF72416
             61 GTCCCGCGGTGGTTGCTGCTGCTGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
ss.DNA40370
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P AAF72416
            121 GACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
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ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
P_AAF72416	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
P_AAF72416	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
P_AAF72416	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
P_AAF72416	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
P_AAF72416	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
P_AAF72416	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
P_AAF72416	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATC
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
P_AAF72416	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
P_AAF72416	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
ss.DNA40370	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
P_AAF72416	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCC
ss.DNA40370	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
P_AAF72416	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA *******************************
P_AAF72416	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
ss.DNA40370	901	CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
P_AAF72416	901	CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
P_AAF72416	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
ss.DNA40370	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC ************************************

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P AAF72416
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ss.DNA40370
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P AAF72416
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ss.DNA40370
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            1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
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P AAF72416
ss.DNA40370
            1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
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P AAF72416
            1621 ATCAAAATAAAGGATGATAATAGATATTAA
>6 P_ABL95586 Human angiogenesis related cDNA PRO302 SEQ ID NO: 51. (1650 bp) [1
 Score = 1650 (3271 \text{ bits}), Expect = 0.0
 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370
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                *************
P ABL95586
             1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss.DNA40370
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P ABL95586
             61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
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P ABL95586
            121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
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ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
P_ABL95586	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
P_ABL95586	241	CTGGTCATGTGGCTTCAGGGCGGTTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC ********************************
P_ABL95586	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT ******************
P_ABL95586	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
P_ABL95586		GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370		TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
P_ABL95586	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
ss.DNA40370		GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC *********************************
P_ABL95586		GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
ss.DNA40370		AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
P_ABL95586	*	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370		CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
P_ABL95586		CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG
ss.DNA40370		GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
P_ABL95586 ss.DNA40370		GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
P ABL95586		ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC *********************************
ss.DNA40370		TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
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ss.DNA40370		CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
P ABL95586		**************************************
ss.DNA40370		AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
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ss.DNA40370		TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC

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>7 P_ABL88097 Human PRO302 cDNA sequence SEQ ID NO:51. cDNA, PAT 16-MAY-2002
(1650 bp) [1 seg]
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 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
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P ABL88097
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ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
P_ABL88097	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTTGGAAACTTTGAG
P_ABL88097	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
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ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
P_ABL88097	361	${\tt AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT}$
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
P_ABL88097	421	${\tt GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC}$
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
P_ABL88097	481	${\tt TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA}$
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
P_ABL88097	541	${\tt GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC}$
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
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P_ABL88097	661	$\tt CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG$
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P_ABL88097	721	$\tt GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCC$
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P_ABL88097	781	${\tt ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC}$
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
P_ABL88097	841	${\tt TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA}$
ss.DNA40370	901	CAGAGCCACCTAGTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
P_ABL88097	901	CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
P_ABL88097	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC

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>8 AX098272 Sequence 11 from Patent WO0119987. DNA, linear, PAT 02-APR-2001
(1650 bp) [1 seg]
 Score = 1650 (3271 bits), Expect = 0.0
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ss.DNA40370

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AX098272	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
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ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
AX098272	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
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AX098272		TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
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AX098272		CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
AX098272	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC

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ss.DNA40370
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 AX454466
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AX454466	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
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AX454466	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
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AX454466	961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC	
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AX454466	1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC	
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ss.DNA40370	L141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA	
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ss.DNA40370	1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT ************************************	
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ss.DNA40370	1381 CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT	
AX454466	1381 CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT	
ss.DNA40370	1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT	
AX454466	1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT	
ss.DNA40370	1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT	
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BD075577 121 GACTGGCCACAGAGGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC	ss.DNA40370	
BD075577	BD075577	
BD075577 241 CTGGTCATGTGGCTTCAGGGCGGTTCTAGGCACTGGATTTGGAAACTTTGAG BD075577 241 CTGGTCATGTGGCTTCAGGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 421 GCCTATGCCAAGGACCTGGCTTCAGGCACTGGGTTCAGTATGTGAATGGTAGTGGT BD075577 421 GCCTATGCCAAGAGACCTGGCTTCAGACACTGAGTGTGTCTCCTGAAGACCTTC SS.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCCAGAGTCCTATGGA BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGGGCTTTATAAGGCCATTCAGCAGGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC SS.DNA40370 601 AAGTGCAACTTTGGCGGGGGTTCCCTTGGGTGATTCCTGGAGGCCATTCGGTG BD075577 601 AAGTGCAACTTTGGGGGGTTCCCTTGGGTGATTCCTCGGAGGGACCATC SS.DNA40370 661 CTCTCCTGGGGGCCTTACCTGTAGAAGACAAAAGGTCTGCAGAG BD075577 611 AAGTGCAACTTTGCGGGGGTTCCCTTTGGTTTCTTCTGGAACCAAAAGGTCTGCAGAG BD075577 611 AGTGCAACTTTGCGGGGGACCTTACCTGTAAAGAACAAAAGGTCTGCAGAGA BD075577 721 GTGTCTAAGGTTGCAGAAGAAAAGATACTGAATTAAAGGGGCTCTACAGAGAAGCC BD075577 721 GTGTCTAAGGTTGAGAGAAAAGAAAAGGTCTTCCTGGAAGACAAAAGGTCTGCAGAGAGC BD075577 781 ACAGAGCTGTGGGGGAAAAGCAAAATGATCTTATAAACAGAACAAAAGGTCTGAAACTTC BD075577 811 ACAGAGCTGTGGGGGAAAAGCAGAAAATGATCATTGAACAGAAACACAGAAGGGCC BD075577 811 ACAGAGCTGTGGGGGAAAAGCACAAAAAGATCTTAAACAGAACCAAAAGGCCTTACAGAAAAGCCCTACAAAGAACCAAAAGGCCCTAAAATAAAGGGGCCTTACAGAAAACCAAAAGACCAAAAGGCCCTAAAATAAAGGGCCTTAAAAAAAA	ss.DNA40370	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
BD075577 241 CTGGTCATGTGGCTTCAGGGGGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC BD075577 301 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC BD075577 481 TTCAGTTGCCACAAAGAATTCCCAGACAGTTCCATTCTACAGTTTCTCCAGAGACCTTC BD075577 481 TTCAGTTGCCACAAAGAATTCCCAGACAGTTCCATTCTACAGTTTCTCCAGAGGCCCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC BD075577 601 AAGTGCAACTTTGGCGGGGTTCCCTTGGGTGATTCCTGGAGCCATTCGGTG BD075577 601 AAGTGCAACTTTGGGGGGGTTCCCTTGGGTGATTCCTGGAGCCATTCGGTG BD075577 601 AAGTGCAACTTTGGGGGGGTTCCCTTGGGTGATTCCTGGAACAAAAGGTCTGGTG BD075577 611 AGTGCAACTTTGCGGGGGTTCCCTTGGTGATTCCTGGAACAAAAGGTCTGGAGG BD075577 611 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTTTCTCGAAGACAAAAGGTCTGGCAGAG BD075577 721 GTGTCTAAGGTTGCAGAGAAATGATCTCTTCTTCTCGAAGACAAAAGGTCTGCAGAGAC BD075577 781 ACAGAGCTGTGGGGGAAAACGAAATGATCTTTCTTCTCAAATAAGGGGCTCTACAGAGAAGCC BD075577 781 ACAGAGCTGTGGGGGAAAACGAAAATGATCTTAAACAGAACACAGAATGGGGTGAACTTC BD075577 781 ACAGAGCTGTGGGGGAAAACGAAAATGATCTTAAACAGAACACAGAATGGGGTGAACTTC BD075577 841 TATAACATCTTAACTAAAAGCACCTCCCACGTCTACAAATGAGACCAGAATGAGTCAAAAGACCTTACAAAGAACCAGAATTCCACAAAGAAACACAGAATTCCACAAAGAACAAAGACCTTAAAATCACAAAAGACCTTAAAAAGACCCTCCCACGTCTACAAATGAACCAAAAGAACAAAAGACCAAAAGAACAAAAGACCAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACAAAAGAACA	BD075577	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
BD075577 241 CTGGTCATGTGGCTTCAGGGGGGTCCAGGCGGTTCTAGCACTGGATTTGAAACCTTTGAG SS.DNA40370 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC SS.DNA40370 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT SS.DNA40370 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC BD075577 421 GCCTATGCCAAAGAACTCCAGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC SS.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 541 GGAAAAATGGCAGCTGGCTATGGTCTATTATAAGGCCATTCACCTATTGGA SS.DNA40370 541 GGAAAAATGGCAGCTGGCTATGGTCTAGAGCTTTATAAGGCCATTCAGCAGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCAGGAGCCATC SS.DNA40370 601 AAGTGCAACTTTGGGGGGGTTGCCTTGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGTGATTCCTGGAACAAAAGGCCCTTGGTG SS.DNA40370 721 GTGTCTAAGGTTGCCTGACAGCATGTCTTCTCTGGAAGACAAAAGGTCTGGCAGAG SS.DNA40370 721 GTGTCTAAGGTTGCAGAAGCAAATGATCTCTTCTCTGAAGACAAAAGGTCTGGCAGAG SS.DNA40370 781 ACAGAGCTGTGGAGAGCAAATGATCATTCAACAGAACAAAAGGCCCTGACAGAGCCAAGGCC SS.DNA40370 781 ACAGAGCTGTGGGGGGAAAACCAGAATGATCATTCAACAGAACAAAGAGCC SS.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCAGGTCTAAATAAA	ss.DNA40370	
BD075577 301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACTGGCTCCAGGCTGCC SS.DNA40370 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT GCCTATGCCAAGGACCTGGCTATGGTGGCTCTCAGACATGATGTTCTCCTGAAGACCTTC BD075577 421 GCCTATGCCACAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCTCTGAAGACCTTC SS.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATCTCACATTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA SS.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGACTTCATCATCTTCACAGTTCCTAGGAGCCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGACTTCAGCGAGGGGACCATC SS.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTTGGGTGATTCCTGGAGTCTCACCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCTGTTGATTCGGTG SS.DNA40370 601 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCAAAGACAAAGGTCTGGCAGAG BD075577 601 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCTGAAGACAAAGGTCTGGCAGAG BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTCTTCTTCTCAAAGACAAAGGTCTGGCAGAG SS.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGATGTCTCTTCTACAAAAAAGGCCTTACAAGAGAGCC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTAAAAGACAAAACACAAAAGACTCTACAAGAGAACCCAAAAGACTTC SS.DNA40370 841 TATAACATCTTAACTAAAAAGCACACCCAACTGCAAACAACACAAAACACCAAAACACCCAAACACCTCAAACACACCAAAACACCCAAACACCCAAACACCCAAACAC	BD075577	
BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT BD075577 361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT Ss.DNA40370 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC BD075577 421 GCCTATGCCAAGAGACTTGCCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC Ss.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA Ss.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCACCGAGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCACCGAGGGACCATC Ss.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCCGTGGTATTCCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGAACACAAAGGTCTGGCTG Ss.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG Ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 781 ACAGAGCTGTGGGGGAAACCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC Ss.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGAGATCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCCAACGAGTCTAGAATTCACA Ss.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	ss.DNA40370	
BD075577 361 AGTCTCCTATTTGTGGATAATCCGTGGGCACTGGTTCAGTTATGTGAATGGTAGTGGT SS.DNA40370 421 GCCTATGCCAAGGACCTGGCTTAGGTGGCTTCAGACAGTGTCTCCTGAAGACCTTC BD075577 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACAGTGTTCTCCTGAAGACCTTC SS.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA SS.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCAAGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC SS.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG SS.DNA40370 661 CTCTCCTGGGGGCCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCACAG SS.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC SS.DNA40370 781 ACAGAGCTGTGGGGGAAAAGGAACAAGTACTAGAACAGAACCAGATGGGGTGAACTTC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC SS.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAAATGGAGTCGAGTCTACAAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAAATGGGGTCTACAAATACAAGAATCCCTA SS.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTTTCAGCGCCCACGTGTAGAACACCAAACGAATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTTTTTTTTTTTTTTTTT	BD075577	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
SS.DNA40370 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC BD075577 421 GCCTATGCCACAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC SS.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA SS.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC SS.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGAATCTCCCCTGTTGATTCGGTG SS.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG SS.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC SS.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAAGATACTGAATGCAGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC SS.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA SS.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	ss.DNA40370	
BD075577 421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGTTCTCCTGAAGACCTTC Ss.DNA40370 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA Ss.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC Ss.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATCCCCCTGTTGATTCGGTG Ss.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCTGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCTC	BD075577	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA SS.DNA40370 541 GGAAAAATGGCAGCTGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC SS.DNA40370 601 AAGTGCAACTTTGCGGGGGGTTGCCTTGGGTGATTCCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGGTTGCCTTGGGTGATTCCCCCTGTTGATTCGGTG SS.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCTGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG SS.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAAATAAGGGGCTCTACAGAGAGGCC SS.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC SS.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAAATGGAGTCGAGTCTAGAATTCACA SS.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTTTCTCAGCGCCACGTTGAACACAACAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTTGTCAGCGCCACGTTGAGACACCTACAACGAGATGCCTTA	ss.DNA40370	
BD075577 481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA ss.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC BD075577 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC ss.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG ss.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATACCGGTAAATAAGGGGCTCTACAGAGAGGCC bD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ss.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC ss.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA ss.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA	BD075577	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
SS.DNA40370 541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC ********************************	ss.DNA40370	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA *********************************
BD075577 541 GGAAAAATGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC ss.DNA40370 601 AAGTGCAACTTTGCGGGGGGTTGCCTTGGGTGATTCCCCTGTTGATTCGGTG bD075577 601 AAGTGCAACTTTGCGGGGGGTTGCCTTGGGTGATTCCTCGATCTCCCCTGTTGATTCGGTG ss.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAAGGTCTGGCAGAG ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGCC bD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ss.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC bD075577 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC ss.DNA40370 841 TATAACATCTTAACTAAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCACACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA	BD075577	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
SS.DNA40370 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCCCTGTTGATTCGGTG BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG SS.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCTC	ss.DNA40370	
BD075577 601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG ss.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ***************************	BD075577	541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
SS.DNA40370 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG SS.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC SS.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAATGACTGAATGAACAGAACACAGATGGGGTGAACTTC BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC SS.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA SS.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCCACGTGAGACACCTACAACGAGATGCCTTA *********************************	ss.DNA40370	
BD075577 661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGAG	BD075577	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ***************************	ss.DNA40370	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
BD075577 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC ss.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	BD075577	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
SS.DNA40370 781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC ********************************	ss.DNA40370	
BD075577 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC ss.DNA40370 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA ss.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	BD075577	721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA ******************************	ss.DNA40370	
BD075577 841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA ss.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA *********************************	,	781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
ss.DNA40370 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA *********************************	ss.DNA40370	
BD075577 901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	BD075577	841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
	ss.DNA40370	
ss.DNA40370 961 AGCCAGCTCATGAATGGCCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC	BD075577	901 CAGAGCCACCTAGTTTGTCTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
	ss.DNA40370	961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC

			•
			-

BD075577	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC	
ss.DNA40370	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC	
BD075577	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC	
ss.DNA40370	1.081	ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG	
BD075577	1081	**************************************	•
ss.DNA40370	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA	
DD045544		***************	
BD075577	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA	
ss.DNA40370	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG	
BD075577	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG	
ss.DNA40370	1261	GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT	
BD075577	1261	**************************************	
ss.DNA40370	1321	GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT	
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ss.DNA40370	1381	CAGCAAGAATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT	
, BD075577	1381	**************************************	
ss.DNA40370	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT *****************************	٠
BD075577	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT	
ss.DNA40370	1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT	
BD075577	1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT	
ss.DNA40370	1561	TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTTTT	
BD075577	1561	TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG	-
ss.DNA40370	1621	ATCAAAATAAAGGATGATAATAGATATTAA	
BD075577	1621	**************************************	
>11 BD173394	Secret	ted and transmembrane polypeptides and nucleic acids encoding	
(1650 bp) [1 Score = 165	seg] 0 (327:	1 bits), Expect = 0.0	
Identities :	= 1650,	/1650 (100%), at 1,1-1650,1650, Strand +/+	
ss.DNA40370	1	GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC	
BD173394	1	GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC	
ss.DNA40370	61	GTCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATT	

BD173394	61	GTCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATT	
ss.DNA40370	121	GACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC	•
BD173394	121	GACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC	
ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	
BD173394	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
BD173394	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC ********************************	
BD173394	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC	
ss.DNA40370		AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT ******************	
BD173394		AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT	
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC *********************************	
BD173394	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC	
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA	· .
BD173394	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA	
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC	,
BD173394	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC	
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG ********************************	
BD173394	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG	
ss.DNA40370	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG	
BD173394	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG	
ss.DNA40370	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
BD173394	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
ss.DNA40370	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
BD173394	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
BD173394	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
ss.DNA40370	901	CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA **********************************	
BD173394	901	CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	

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            961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
ss.DNA40370 1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
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   BD173394 1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
ss.DNA40370 1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
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   BD173394 1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
ss.DNA40370 1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
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   BD173394 1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
ss.DNA40370 1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
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   BD173394 1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
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   BD173394 1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
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   BD173394 1381 CAGCAAGAATAGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
ss.DNA40370 1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
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   BD173394 1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
ss.DNA40370 1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
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   BD173394 1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
ss.DNA40370 1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG
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   BD173394 1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTG
ss.DNA40370 1621 ATCAAAATAAAGGATGATAATAGATATTAA
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   BD173394 1621 ATCAAAATAAAGGATGATAATAGATATTAA
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(1650 bp) [1 seg]
Score = 1650 (3271 \text{ bits}), Expect = 0.0
Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
           1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss.DNA40370
               ***************
   BD173075
            1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss.DNA40370 61 GTCCCGCGGTGGTTGCTGCTGCTGCTGCTGCTGCTGGCCTGAACGCAGGAGCTGTCATT
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961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC

ss.DNA40370

BD173075	61	GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
ss.DNA40370	121	GACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
BD173075	121	GACTGGCCCACAGGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
BD173075	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG *********************************
BD173075	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC ********************************
BD173075	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
BD173075	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
BD173075	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
BD173075	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC *********************************
BD173075	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG ********************************
BD173075	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG
BD173075	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
ss.DNA40370	. 721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
BD173075	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
ss.DNA40370	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC *********************************
BD173075	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA *******************************
BD173075	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
ss.DNA40370	901	CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
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ss.DNA40370
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   BD173075
 ss.DNA40370
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   BD173075
            1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
            1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
 ss.DNA40370
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   BD173075
            1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
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   BD173075
            1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
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 ss.DNA40370
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   BD173075
            1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
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            1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
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            1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
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>13 AX490944 Sequence 51 from Patent WOO200690. DNA, linear, PAT 16-AUG-2002
(1650 bp) [1 seq]
Score = 1650 (3271 bits), Expect = 0.0
Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370
              1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
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1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC

AX490944

ss.DNA40370	61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
AX490944	61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGGGGCCTGAACGCAGGAGCTGTCATT
ss.DNA40370	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC ***********************************
AX490944	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
ss.DNA40370	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
AX490944	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
AX490944	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTTGGAAACTTTGAG
ss.DNA40370	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
AX490944	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT ******************
AX490944	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
ss.DNA40370	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
AX490944	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
AX490944	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
ss.DNA40370	541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC *********************************
AX490944	541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
ss.DNA40370	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
AX490944	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG
AX490944	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG
ss.DNA40370	721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
AX490944	721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGGCTCTACAGAGAGGCC
ss.DNA40370	781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
AX490944	781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
ss.DNA40370	841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
AX490944	841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
ss.DNA40370	901 CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA

AX490944	901	CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
AX490944	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
ss.DNA40370	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
AX490944	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
ss.DNA40370	1081	ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
AX490944	1081	ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
ss.DNA40370	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
AX490944	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
ss.DNA40370	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
AX490944	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
ss.DNA40370	1261	GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
AX490944	1261	GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
ss.DNA40370	1321	GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
AX490944	1321	GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
ss.DNA40370	1381	CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
AX490944	1381	CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
ss.DNA40370	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
AX490944	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
ss.DNA40370	1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT **********************************
AX490944	1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
ss.DNA40370	1561	TGGAAATTATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG **********
AX490944	1561	TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTTTG
ss.DNA40370	1621	ATCAAAATAAAGGATGATAATAGATATTAA ************
AX490944	1621	ATCAAAATAAAGGATGATAATAGATATTAA
(1650 bp) [i s	seg]	ted and transmembrane polypeptides and nucleic acids encoding bits), Expect = 0.0
		1650 (100%), at 1,1-1650,1650, Strand +/+
ss.DNA40370	1	GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC

 ${\tt 1} {\tt \ GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC}$

BD172756

ss.DNA40370	61 GTCCCGCGGTGCTGCTGCTGCTGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCAT	r
BD172756	**************************************	
ss.DNA40370	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGC	
DD1 72756	*****************	*
BD172756	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGC	3 .
ss.DNA40370	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCC	
BD172756	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCC	
ss.DNA40370	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGA	
BD172756	241 CTGGTCATGTGGCTTCAGGGCGGTTCTAGCACTGGATTTGGAAACTTTGA	
ss.DNA40370	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGC	
BD172756	**************************************	
ss.DNA40370	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGG	
BD172756	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGG	
ss.DNA40370	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTT	
BD172756	**************************************	
ss.DNA40370	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGG	Δ.
	****************	*
BD172756	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGG	7
ss.DNA40370	541 GGAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCAT	
BD172756	541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCAT	
ss.DNA40370	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGT	
BD172756	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGT	
ss.DNA40370	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGA	
	****************	+
BD172756	661 CTCTCCTGGGGACCTTACCTGTÁCAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAC	}
ss.DNA40370	721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
BD172756	721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
ss.DNA40370	781 ACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
BD172756	**************************************	
ss.DNA40370	841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
BD172756	**************************************	•
ss.DNA40370	901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA	

•

BD172756	901	CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
BD172756	961	AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
ss.DNA40370	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
BD172756	1021	TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
ss.DNA40370	1081	ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
BD172756	1081	ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
ss.DNA40370	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
BD172756	1141	CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
ss.DNA40370	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
BD172756	1201	GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
ss.DNA40370	1261	GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
BD172756	1261	GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
ss.DNA40370	1321	GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
BD172756	1321	GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
ss.DNA40370	1381	CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
BD172756	1381	CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
ss.DNA40370	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT *****************************
BD172756	1441	GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
ss.DNA40370	-1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT **********************************
BD172756	1501	GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
ss.DNA40370	1561	TGGAAATTATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG **********
BD172756	1561	TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTTTT
ss.DNA40370	1621	ATCAAAATAAAGGATGATAATAGATATTAA ************
BD172756	1621	ATCAAAATAAAGGATGATAATAGATATTAA
>15 BD172437 (1650 bp) [1 s		ced and transmembrane polypeptides and nucleic acids encoding
		L bits), Expect = 0.0 /1650 (100%), at 1,1-1650,1650, Strand +/+
	/	2000 (2000); at 1/1 1000/1000; beland +/+
ss.DNA40370	1	GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC

BD172437	1 GCCTGTTGCTGATGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC
ss.DNA40370	61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
BD172437	61 GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT
ss.DNA40370	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC
BD172437	121 GACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGGATTATGTGACGGTCCGCAAGGATGCC
ss.DNA40370	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
BD172437	181 TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC
ss.DNA40370	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
BD172437	241 CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG
ss.DNA40370	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
BD172437	301 GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC
ss.DNA40370	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT ******************
BD172437	361 AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT
ss.DNA40370	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC *********************************
BD172437	421 GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC
ss.DNA40370	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA *********************************
BD172437	481 TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA
ss.DNA40370	541 GGAAAAATGGCAGCTTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
BD172437	541 GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC
ss.DNA40370	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG *******************************
BD172437	601 AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG
ss.DNA40370 BD172437	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCTC
ss.DNA40370	661 CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG 721 GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC
BD172437	721 GIGICIAAGGIIGCAGAGCAAGIACIGAAIGCCGIAAAIAAGGGGCICIACAGAGAGGCC ****************************
ss.DNA40370	781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
BD172437	781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACACATGGGTGAACTTC 781 ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC
ss.DNA40370	841 TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA
BD172437	**************************************

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ss.DNA40370
             901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
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   BD172437
             901 CAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
 ss.DNA40370
             961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
   BD172437
             961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
ss.DNA40370
            1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
                ***********************
   BD172437
            1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
 ss.DNA40370 1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
                ******************
   BD172437
            1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
 ss.DNA40370 1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
                *************
   BD172437
            1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
 ss.DNA40370
            1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
   BD172437
            1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
 ss.DNA40370
            1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
                *********************
   BD172437
            1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
 ss.DNA40370
            1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
                ****************
   BD172437
            1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
 ss.DNA40370
            1381 CAGCAAGAATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
                 ********************
   BD172437
            1381 CAGCAAGAATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
 ss.DNA40370
            1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
                *************
   BD172437
            1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
 ss.DNA40370
            1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
                ********************
            1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
 ss.DNA40370
            1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTG
                **************
   BD172437 1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTG
 ss.DNA40370 1621 ATCAAAATAAAGGATGATAATAGATATTAA
                ********
   BD172437 1621 ATCAAAATAAAGGATGATAATAGATATTAA
>16 BD175428 Secretory and transmembrane polypeptide and nucleic acid encoding
(1650 bp) [1 seq]
 Score = 1650 (3271 bits), Expect = 0.0
 Identities = 1650/1650 (100%), at 1,1-1650,1650, Strand +/+
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ss.DNA40370 1 GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC

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			•

BD175428	1	GCCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCC	
ss.DNA40370	61	GTCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATT	
BD175428	61	**************************************	
ss.DNA40370	121	GACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCC	
BD175428	121	**************************************	
ss.DNA40370	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	

BD175428	181	TACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCC	
ss.DNA40370	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
BD175428	241	CTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAG	
ss.DNA40370	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC	
BD175428	301	GAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCC	
ss.DNA40370	361	AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT	
BD175428	361	${\tt AGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGT}$	
ss.DNA40370	421	GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC	
BD175428	421	${\tt GCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTC}$	
ss.DNA40370	481	TTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGA	
BD175428	481		•
ss.DNA40370	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATC	
BD175428	541	GGAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATC	
ss.DNA40370	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG	
BD175428	601	AAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTG	
ss.DNA40370	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAG	
BD175428	661	CTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAG	
ss.DNA40370	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
BD175428	721	GTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCC	
ss.DNA40370	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
BD175428	781	ACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTC	
ss.DNA40370	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	
BD175428	841	TATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACA	

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901 CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370
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   BD175428
            901 CAGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTA
ss.DNA40370
            961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
                ***********************
            961 AGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCC
   BD175428
ss.DNA40370 1021 TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC
                ***********************
           {\tt 1021} \ \ {\tt TGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTC}
   BD175428
           1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
ss.DNA40370
                ******************
   BD175428
           1081 ATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAG
ss.DNA40370
           1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
                **********************
   BD175428
           1141 CTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCA
ss.DNA40370
           1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
                *********
   BD175428 1201 GAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTG
          1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
ss.DNA40370
   BD175428
           1261 GAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCT
ss.DNA40370
           1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
                   *****************
  BD175428 1321 GGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACT
ss.DNA40370
           1381 CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
                ***********************
  BD175428
           1381 CAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCT
ss.DNA40370
           1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
                ******************
  BD175428
           1441 GAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGT
ss.DNA40370
           1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
               *******************
  BD175428 1501 GATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATT
ss.DNA40370 1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG
               ******************
  BD175428
          1561 TGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTG
ss.DNA40370 1621 ATCAAAATAAAGGATGATAATAGATATTAA
               ********
  BD175428 1621 ATCAAAATAAAGGATGATAATAGATATTAA
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>17 P_ABV72656 Human retinoid inducible serine carboxypeptidase cDNA. (1921 bp)
[1 seg]
Score = 1648 (3267 bits) Franct 0.0

Score = 1648 (3267 bits), Expect = 0.0 Identities = 1648/1648 (100%), at 2,1-1649,1648, Strand +/+

,	
ss.DNA40370	2 CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
P_ABV72656	1 CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
ss.DNA40370	62 TCCCGCGGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTG
P_ABV72656	**************************************
ss.DNA40370	122 ACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT

P_ABV72656	121 ACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
ss.DNA40370	182 ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC ********************************
P_ABV72656	181 ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
ss.DNA40370	242 TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
P_ABV72656	**************************************
ss.DNA40370	302 AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
P_ABV72656	**************************************
_	
ss.DNA40370	362 GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG *****************
P_ABV72656	361 GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
ss.DNA40370	422 CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
P_ABV72656	421 CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
ss.DNA40370	482 TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
P_ABV72656	481 TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
ss.DNA40370	542 GAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCA
P_ABV72656	**************************************
ss.DNA40370	602 AGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGC
P_ABV72656	**************************************
_	
ss.DNA40370	662 TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGG *******************************
P_ABV72656	661 TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGG
ss.DNA40370	722 TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA
P_ABV72656	721 TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA
ss.DNA40370	782 CAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT
P_ABV72656	781 CAGAGCTGTGGGGAAAACAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT
ss.DNA40370	842 ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
,	************

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P ABV72656
             841 ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
ss.DNA40370
             902 AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
                 ***********************
P ABV72656
             901 AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
ss.DNA40370
             962 GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
                 *********************
P ABV72656
             961 GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
            1022 GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
ss.DNA40370
                 ********************
P ABV72656
            1021 GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
ss.DNA40370
            1082 TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
                 ***********************
P ABV72656
            1081 TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
ss.DNA40370
            1142 TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
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P ABV72656
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ss.DNA40370
            1202 AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
P ABV72656
            1201 AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
ss.DNA40370
            1262 AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
                 *******************
P ABV72656
            1261 AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
ss.DNA40370
            1322 GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC
                 ******************
P ABV72656
            1321 GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC
ss.DNA40370
            1382 AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
                 ***********************
P ABV72656
            1381 AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
ss.DNA40370
            1442 AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
                 *****************
P ABV72656
            1441 AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
ss.DNA40370
            1502 ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
                 ******************
P_ABV72656
            1501 ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
ss.DNA40370
            1562 GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTGA
                ***********************
P_ABV72656
            1561 GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTGA
ss.DNA40370
            1622 TCAAAATAAAGGATGATAATAGATATTA
                ********
P_ABV72656
            1621 TCAAAATAAAGGATGATAATAGATATTA
>18 P_ABV77921 Hypoxia-induced protein coding sequence #35. DNA, PAT 12-NOV-
2002 (1921 bp) [1 seg]
Score = 1640 (3251 bits), Expect = 0.0
Identities = 1646/1648 (99%), at 2,1-1649,1648, Strand +/+
```

ss.DNA40370	2 CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
P_ABV77921	1 CCTGTTGCTGATGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
ss.DNA40370	62 TCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTG
P_ABV77921	**************************************
ss.DNA40370	122 ACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
P_ABV77921	121 ACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
ss.DNA40370	182 ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
P_ABV77921	181 ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
ss.DNA40370	242 TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
P_ABV77921	**************************************
ss.DNA40370	302 AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
P_ABV77921	**************************************
ss.DNA40370	362 GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
P_ABV77921	**************************************
ss.DNA40370	422 CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
P_ABV77921	**************************************
ss.DNA40370	482 TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
P_ABV77921	481 TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
ss.DNA40370	542 GAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCA
P_ABV77921	**************************************
ss.DNA40370	602 AGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGC
P_ABV77921	**************************************
ss.DNA40370	662 TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGG
P_ABV77921	661 TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGG
ss.DNA40370	722 TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA
P_ABV77921	**************************************
ss.DNA40370	782 CAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT
P_ABV77921	781 CAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT
ss.DNA40370	842 ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC

P_ABV77921	841	ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
ss.DNA40370	902	AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
P_ABV77921	901	AGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
ss.DNA40370	962	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
P_ABV77921	961	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
ss.DNA40370	1022	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
P_ABV77921	1021	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
ss.DNA40370	1082	TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
P_ABV77921	1081	TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
ss.DNA40370	1142	TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
P_ABV77921	1141	TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
ss.DNA40370	1202	AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
P_ABV77921	1201	AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
ss.DNA40370	1262	AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
P_ABV77921	1261	AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
ss.DNA40370	1322	GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC ***********************************
P_ABV77921	1321	GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC
ss.DNA40370	1382	AGCAAGAATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
P_ABV77921	1381	AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
ss.DNA40370	1442	AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
P_ABV77921	1441	AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
ss.DNA40370	1,502	ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
P_ABV77921	1501	ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
ss.DNA40370	1562	GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGA
P_ABV77921	1561	GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTTTTGA
ss.DNA40370	1622	TCAAAATAAAGGATGATAATAGATATTA *************
P_ABV77921	1621	TCAAAATAAAGGATGATAATAGATATTA

>19 AF282618 Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1) (1921 bp) [1 seg] Score = 1640 (3251 bits), Expect = 0.0

Identities = 1646/1648 (99%), at 2,1-1649,1648, Strand +/+

ss.DNA40370	2	CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
AF282618	1	CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
ss.DNA40370	62	TCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTG
AF282618	61	**************************************
ss.DNA40370	122	ACTGGCCCACAGAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
AF282618	121	ACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
ss.DNA40370	182	ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
AF282618	181	ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
ss.DNA40370	242	TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
AF282618	241	TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
ss.DNA40370	302	AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
AF282618	301	AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
ss.DNA40370	362	GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
AF282618	361	GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
ss.DNA40370	422	CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
AF282618	421	${\tt CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT}$
ss.DNA40370	482	TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
AF282618	481	TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
ss.DNA40370	542	GAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCA
AF282618	541	GAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCA
ss.DNA40370	602	AGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGC
AF282618	601	AGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCCGTGGATTCGGTGC
ss.DNA40370	662	TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGG *******************************
AF282618	661	TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGG
ss.DNA40370		TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGGCTCTACAGAGAGGCCA
AF282618		TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA
ss.DNA40370		CAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT
AF282618	781	CAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT

ss.DNA40370	842	ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
AF282618	841	ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
ss.DNA40370	902	AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
AF282618	901	AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
ss.DNA40370	962	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
AF282618	961	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
ss.DNA40370	1022	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA ************************************
AF282618	1021	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
ss.DNA40370	1082	**************
AF282618		TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
ss.DNA40370		TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
AF282618		TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
ss.DNA40370		AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
AF282618		AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
ss.DNA40370		AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
AF282618 ss.DNA40370		AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
AF282618		GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC ***********************************
ss.DNA40370		AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
AF282618		**************************************
ss.DNA40370		AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
AF282618		**************************************
ss.DNA40370	•	ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
AF282618	1501	**************************************
ss.DNA40370	1562	GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTGATTTGTTTTGA
AF282618	1561	**************************************
ss.DNA40370	1622	TCAAAATAAAGGATGATAATAGATATTA
AF282618	1621	**************************************

 $>\!\!20$ NM_021626 Homo sapiens likely homolog of rat and mouse retinoid-inducible (1921 bp) [1 seg]

Score = 1640 (3251 bits), Expect = 0.0 Identities = 1646/1648 (99%), at 2,1-1649,1648, Strand +/+

		\cdot
ss.DNA40370	2	CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
NM_021626	1	L CCTGTTGCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCG
ss.DNA40370	62	2 TCCCGCGGTGGTTGCTGCTGCTGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTG
NM_021626	61	L TCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTG
ss.DNA40370	122	ACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
NM_021626	121	ACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCT
ss.DNA40370	182	ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
NM_021626	181	ACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCC
ss.DNA40370	242	TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
NM_021626	241	TGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGG
ss.DNA40370	302	AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
NM_021626	301	AAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCA
ss.DNA40370	362	GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
NM_021626	361	GTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTG
ss.DNA40370	422	CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
NM_021626	421	CCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCT
ss.DNA40370	482	**************************************
NM_021626	481	TCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAG
ss.DNA40370	542	**************************************
NM_021626		GAAAAATGGCAGCTGGCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATCA /
ss.DNA40370		AGTGCAACTTTGCGGGGGTTGCĆTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGC *******************************
NM_021626		AGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCCGTGGATTCGGTGC
ss.DNA40370		TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGG *******************************
NM_021626		TCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGG
ss.DNA40370		TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA ***************************
NM_021626		TGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCA
ss.DNA40370		CAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT ********************************
NM_021626	781	CAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCT

ss.DNA40370	842	ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
NM_021626	841	ATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACAC
ss.DNA40370	902	AGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
NM_021626	901	AGAGCCACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAA
ss.DNA40370	962	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
NM_021626	961	GCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCT
ss.DNA40370	1022	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA ************************************
NM_021626	1021	GGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCA
ss.DNA40370	1082	TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
NM_021626	1081	TTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGC
ss.DNA40370	1142	TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
NM_021626	1141	TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAG
ss.DNA40370	1202	AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG ********************************
NM_021626	1201	AACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGG
ss.DNA40370	1262	AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
NM_021626	1261	AAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTG
ss.DNA40370	1322	GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC ***********************************
NM_021626	1321	GTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTC
ss.DNA40370	1382	AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG ***********************************
NM_021626		AGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTG
ss.DNA40370		AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG ****************************
		AGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTG
ss.DNA40370		ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT *********************************
NM_021626		ATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTT
ss.DNA40370		GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGA **********
NM_021626		GGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTTTGA
ss.DNA40370		TCAAAATAAAGGATGATAATAGATATTA *************
NM_021626	1621	TCAAAATAAAGGATGATAATAGATATTA

>21 P_AAH15579 Human cDNA sequence SEQ ID NO:13881. (1641 bp) [1 seg]

Score = 1637 (3245 bits), Expect = 0.0 Identities = 1640/1641 (99%), at 8,1-1648,1641, Strand +/+

ss.DNA40370	8	GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
P_AAH15579	1	GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
ss.DNA40370	68	GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
P_AAH15579	61	GGTGGTTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
ss.DNA40370	128	CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
P_AAH15579	121	CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
ss.DNA40370	188	TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
P_AAH15579	181	${\tt TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA}$
ss.DNA40370	248	TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
P_AAH15579	241	TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
ss.DNA40370	308	GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
P_AAH15579	301	GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
ss.DNA40370	368	TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
P_AAH15579	361	TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
ss.DNA40370	428	CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
P_AAH15579	421	CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
ss.DNA40370	488	GCCACAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
P_AAH15579	481	GCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
ss.DNA40370	548	TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
P_AAH15579	541	TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
ss.DNA40370	608	ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT
P_AAH15579	601	ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT
ss.DNA40370	668	GGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA ***********************************
P_AAH15579	661	GGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
ss.DNA40370	728	AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGC
P_AAH15579	721	AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCCACAGAGC
ss.DNA40370	788	TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
P_AAH15579	781	$\tt TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA$

ss.DNA40370	848	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
P_AAH15579	841	${\tt TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC}$
ss.DNA40370	908	ACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
P_AAH15579	901	ACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
ss.DNA40370	968	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
P_AAH15579	961	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
ss.DNA40370	1028	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA
P_AAH15579	1021	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA
ss.DNA40370	1088	TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC
P_AAH15579	1081	TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC
ss.DNA40370	1148	TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC ***********************************
P_AAH15579	1141	TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC
ss.DNA40370	1208	CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT
P_AAH15579	1201	CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT
ss.DNA40370	1268	CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
P_AAH15579	1261	CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
ss.DNA40370	1328	TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
P_AAH15579	1321	TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
ss.DNA40370	1388	AATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
P_AAH15579	1381	AATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
ss.DNA40370	1448	GGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG ***********************************
P_AAH15579	1441	GGCCGCTGAAGCTGTAGGAAGCGCCACTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG
ss.DNA40370	1508	AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT ****************************
P_AAH15579		AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT
ss.DNA40370		TATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA ********************************
P_AAH15579		TATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA
ss.DNA40370		TAAAGGATGATAATAGATATT *************
P_AAH15579	1621	TAAAGGATGATAATAGATATT

>22 P_ABV28721 Human prostate expression marker cDNA 28712. (1973 bp) [1 seg]

```
Score = 1637 (3245 bits), Expect = 0.0
Identities = 1637/1637 (100%), at 13,32-1649,1668, Strand +/+
```

ss.DNA40370	13	TGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGG
P_ABV28721	32	
ss.DNA40370	- 73	TTGCTGCTGCCGCCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACA
P_ABV28721	92	TTGCTGCTGCCGCCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACA
ss.DNA40370	133	GAGGAGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGG
P_ABV28721	152	GAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGG
ss.DNA40370	193	TGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGG
P_ABV28721	212	TGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGG
ss.DNA40370	253	CTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCC
P_ABV28721	272	CTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCC
ss.DNA40370	313	CTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTT *****************************
P_ABV28721	332	CTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTT
ss.DNA40370	373	GTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAG
P_ABV28721		GTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAG
ss.DNA40370	433	GACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCAC **********************************
P_ABV28721		GACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCAC
ss.DNA40370		AAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCA ***********************************
P_ABV28721		AAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCA
ss.DNA40370	553	GCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTT ********************************
P_ABV28721	572	
ss.DNA40370	613	GCGGGGTTGCCTTGGGTGATTĆCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGA
P_ABV28721	632	GCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGA
ss.DNA40370	673	CCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTT
P_ABV28721	692	CCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTT
ss.DNA40370	733	GCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGG ********************************
P_ABV28721	752	GCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGG
ss.DNA40370	793	GGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTA *********************
P_ABV28721	812	GGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTA

ss.DNA40370	853	ACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTA
P_ABV28721	872	2 ACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTA
ss.DNA40370	913	GTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATG
P_ABV28721	927	*******************
F_ADV20721		? GTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATG
ss.DNA40370	973	AATGGCCCCATCAGAAAGAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAG
P_ABV28721	992	AATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAG
ss.DNA40370	1033	GCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTG
P_ABV28721	1052	**************************************
ss.DNA40370	1093	GACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATC

P_ABV28721	1112	GACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATC
ss.DNA40370	1153	GTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAA
P_ABV28721	1170	***************
P_ABV20/21	11/2	GTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAA
ss.DNA40370	1213	TTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCT
P_ABV28721	1232	TTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCT
ss.DNA40370	1273	TTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTT

P_ABV28721	1292	TTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTT
ss.DNA40370	1333	CCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAG
P_ABV28721	1352	CCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAG
ss.DNA40370	1393	GATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCC
P ABV28721	1412	**************************************
_		
ss.DNA40370	1453	CTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGT *******************************
P_ABV28721	1472	CTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGT
ss.DNA40370	1513	TCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTT
P_ABV28721	1520	***************
F_ABV28/21	1532	TCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTT
ss.DNA40370	1573	CTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAG
P_ABV28721	1592	CTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAG
ss.DNA40370	1633	GATGATAATAGATATTA
D ADMONDO	16-0	********
P_ABV28721	1652	GATGATAATAGATATTA

>23 AK027373 Homo sapiens cDNA FLJ14467 fis, clone MAMMA1000672, weakly (1641 bp) [1 seg]

Score = 1637 (3245 bits), Expect = 0.0

Identities = 1640/1641 (99%), at 8,1-1648,1641, Strand +/+

24011020200	- 1010	/1041 (350), de 6,1-1040,1641, Schalle +/+
ss.DNA40370	8	GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
AK027373	1	GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
ss.DNA40370	68	GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC **********************************
AK027373	61	GGTGGTTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
ss.DNA40370	128	CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT ***********************************
AK027373	121	CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
ss.DNA40370	188	TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
AK027373	181	TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
ss.DNA40370	248	**************************************
AK027373	241	TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
ss.DNA40370	308	**************************************
AK027373		GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
ss.DNA40370		TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG ***********************************
AK027373		TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
ss.DNA40370		CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
AK027373		CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
ss.DNA40370		GCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAA
AK027373		GCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
ss.DNA40370	548	TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA ************************************
AK027373 ss.DNA40370		TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
AK027373		ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCTGTTGATTCGGTGCTCTCCT
ss.DNA40370		ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCTGTTGATTCGGTGCTCTCCT
AK027373		GGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA ***********************************
ss.DNA40370		GGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
		AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGC *********************
AK027373		AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGC
ss.DNA40370	788	TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA

AK027373	781	1 TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
ss.DNA40370	848	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
AK027373	841	L TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
ss.DNA40370	908	ACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
AK027373	901	ACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
ss.DNA40370	968	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
AK027373	961	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
ss.DNA40370	1028	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA
AK027373	1021	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA
ss.DNA40370	1088	TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC
AK027373	1081	TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC
ss.DNA40370	1148	TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC ***********************************
AK027373	1141	TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC
ss.DNA40370	1208	CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT
AK027373	1201	CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT
ss.DNA40370	1268	CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
AK027373	1261	CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
ss.DNA40370	1328	**************************************
AK027373		TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
ss.DNA40370		AATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
AK027373		AATAGGATGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
ss.DNA40370		GGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG ***********************************
AK027373		GGCCGCTGAAGCTGTAGGAAGCGCCACTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG
ss.DNA40370		AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT ****************************
AK027373		AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT
ss.DNA40370		TATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA ********************************
AK027373		TATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA
ss.DNA40370		TAAAGGATGATAATT ************************
AK027373	1621	TAAAGGATGATAATATT

```
>24 BD157571 Primer for synthesizing full-length cDNA and use thereof. (1641 bp)
 Score = 1637 (3245 \text{ bits}), Expect = 0.0
 Identities = 1640/1641 (99%), at 8,1-1648,1641, Strand +/+
               8 GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
ss.DNA40370
                 *******************
  BD157571
               1 GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
ss.DNA40370
              68 GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
  BD157571
              61 GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
ss.DNA40370
             128 CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
                       ******************
  BD157571
             121 CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
             188 TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
ss.DNA40370
                **********************
             181 TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
  BD157571
ss.DNA40370
             248 TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
                ******************
  BD157571
             241 TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
             308 GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
ss.DNA40370
                ************
  BD157571
             301 GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
ss.DNA40370
             368 TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
                *****************
  BD157571
             361 TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
ss.DNA40370
             428 CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
                ****************
  BD157571
             421 CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
             488 GCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
ss.DNA40370
                *******************
  BD157571
             481 GCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
ss.DNA40370
             548 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
                *****************
 BD157571
             541 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
ss.DNA40370
             608 ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT
                *******************
 BD157571
             601 ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT
ss.DNA40370
            668 GGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
                *******************
 BD157571
            661 GGGGACCTTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
ss.DNA40370
            728 AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCCCACAGAGC
                ********************
 BD157571
            721 AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCCCACAGAGC
```

ss.DNA40370	788	TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
BD157571	781	TGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
ss.DNA40370	848	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
BD157571	841	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
ss.DNA40370	908	ACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
BD157571	901	ACCTAGTTTGTCTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
ss.DNA40370	968	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
BD157571	961	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
ss.DNA40370		GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA ***********************************
BD157571	1021	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA
ss.DNA40370	1088	TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC ************************************
BD157571		TTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATC
ss.DNA40370	1148	**************************************
BD157571 ss.DNA40370		TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC
BD157571		CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT *********************************
ss.DNA40370		CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA

BD157571		CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
ss.DNA40370		TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
BD157571		TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
ss.DNA40370		AATAGGATGGATGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA ************************************
BD157571	1381	AATAGGATGGATGGGCTGGAGATGAGCTGGCTTTGGCCTTGGGGCACAGAGCTGAGCTGA
ss.DNA40370	1448	GGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG ***********************************
BD157571	1441	GGCCGCTGAAGCTGTAGGAAGCGCCACTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG
ss.DNA40370	1508	AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT ****************************
BD157571	1501	AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT
ss.DNA40370		TATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA ********************************
BD157571		TATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA
ss.DNA40370	1628	TAAAGGATGATAATATT ****************

BD157571 1621 TAAAGGATGATAATAGATATT

>25 P_AAH72787 Human cervical cancer marker nucleic acid 4061. (1977 bp) [1 seg]
Score = 1633 (3237 bits), Expect = 0.0
Identities = 1633/1633 (100%), at 17,40-1649,1672, Strand +/+

identities =	: 1633	/1633 (100%), at 17,40-1649,1672, Strand +/+
ss.DNA40370	17	GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGC
P_AAH72787	40	GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGC
ss.DNA40370	77	TGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGG
P_AAH72787	100	TGCTGCTGCCGCTGCTGGGCCTGAACGCAGGGGCTGTCATTGACTGGCCCACAGAGG
ss.DNA40370	137	AGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGC
P_AAH72787	160	AGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGC
ss.DNA40370	197	TCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTC
P_AAH72787	220	TCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTC
ss.DNA40370	257	AGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTG
P_AAH72787	280	AGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTG
ss.DNA40370	317	ACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGG
P_AAH72787	340	ACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGG
ss.DNA40370	377	ATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACC
P_AAH72787	400	ATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACC
ss.DNA40370	437	TGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAG
P_AAH72787	460	TGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAG
ss.DNA40370	497	AATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTG
P_AAH72787	520	AATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTG
ss.DNA40370	557	GCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGG
P_AAH72787	580	GCATTGGTCTAGAGCCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGG
ss.DNA40370	617	GGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTT
P_AAH72787	640	GGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTT
ss.DNA40370	677	ACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAG
P_AAH72787	700	ACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAG
ss.DNA40370	737	AGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGA ******************************
P_AAH72787	760	AGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGGGCCACAGAGCTGTGGGGGA

ss.DNA40370	797	AAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTA
P_AAH72787	820	AAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTA
ss.DNA40370	857	AAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTT
P_AAH72787	880	AAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTT
ss.DNA40370	917	GTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATG
P_AAH72787	940	GTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATG
ss.DNA40370	977	GCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTA
P_AAH72787	1000	${\tt GCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTA}$
ss.DNA40370	1037	CCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACG
P_AAH72787	1060	${\tt CCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACG}$
ss.DNA40370	1097	AGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAG
P_AAH72787	1120	AGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAG
ss.DNA40370	1157	ATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCA
P_AAH72787	1180	ATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCA
ss.DNA40370	1217	GTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTG *****************************
P_AAH72787	1240	GTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTG
ss.DNA40370	1277	TCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTT
P_AAH72787	1300	${\tt TCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTT}$
ss.DNA40370	1337	CTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATG
P_AAH72787	1360	CTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATG
ss.DNA40370	1397	GATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCGCTGA ************************************
P_AAH72787	1420	GATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCGCTGA
ss.DNA40370	1457	AGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTG
P_AAH72787	1480	AGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTG
ss.DNA40370	1517	ACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGC
P_AAH72787	1540	ACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGC
ss.DNA40370	1577	TTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATG **************************
P_AAH72787	1600	TTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATG
ss.DNA40370	1637	ATAATAGATATTA ********

P_AAH72787 1660 ATAATAGATATTA

>26 AX188369 Sequence 4064 from Patent WO0142467. DNA, linear, PAT 06-AUG-2001 (1977 bp) [1 seg]

Score = 1633 (3237 bits), Expect = 0.0

Identities = 1633/1633 (100%), at 17,40-1649,1672, Strand +/+

Identities	= 1633	/1633 (100%), at 17,40-1649,1672, Strand +/+
ss.DNA40370	17	GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGC
AX188369	40	${\tt GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGGGGGTGGTTGC}$
ss.DNA40370	77	TGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGG
AX188369	100	TGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGG
ss.DNA40370	137	AGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGC
AX188369	160	${\tt AGGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGC}$
ss.DNA40370	197	TCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTC
AX188369	220	TCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTC
ss.DNA40370	257	AGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTG
AX188369	280	AGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTG
ss.DNA40370	317	ACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGG
AX188369	340	ACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGG
ss.DNA40370	377	ATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACC
AX188369	400	ATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACC
ss.DNA40370	437	TGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAG
AX188369	460	${\tt TGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAG}$
ss.DNA40370	497	AATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTG
AX188369	520	AATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTG
ss.DNA40370	557	GCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGG
AX188369	580	GCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGG
ss.DNA40370	617	GGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTT
AX188369	640	GGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTT
ss.DNA40370	677	ACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAG
AX188369	700	ACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAG
ss.DNA40370	737	AGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGA
AX188369	760	AGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGA

	ss.DNA40370	797	AAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTA
	AX188369	820	AAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTA
	ss.DNA40370	857	AAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTT
	AX188369	880	AAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTT
	ss.DNA40370	917	GTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATG
	AX188369	940	GTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATG
	ss.DNA40370	977	GCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTA
	AX188369	1000	GCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTA
	ss.DNA40370	1037	CCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACG
	AX188369	1060	CCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACG
	ss.DNA40370	1097	AGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAG
	AX188369	1120	AGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAG
	ss.DNA40370	1157	ATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCA
	AX188369	1180	ATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCA
	ss.DNA40370	1217	GTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTG *****************************
	AX188369	1240	GTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTG
	ss.DNA40370	1277	TCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTT ******************************
	AX188369	1300	${\tt TCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTT}$
	ss.DNA40370	1337	CTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATG ***************************
	AX188369		CTGACCAAGGGGACATGGCTCTGAAGATGATGAGGACTGGTGACTCAGCAAGAATAGGATG
	ss.DNA40370		GATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCGCTGA ************************************
	AX188369		GATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCGCTGA
	ss.DNA40370		AGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTG ********************************
	AX188369		AGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTG
•	ss.DNA40370		ACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGC ********************************
	AX188369	•	ACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGC
	ss.DNA40370		TTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATG
	AX188369		TTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATG
	ss.DNA40370	1637	ATAATAGATATTA

AX188369 1660 ATAATAGATATTA

>27 P_AAD12590 Human protein having hydrophobic domain encoding cDNA clone HP03959. (1897 bp) [1 seg]

Score = 1619 (3209 bits), Expect = 0.0 Identities = 1622/1623 (99%), at 27,1-1649,1623, Strand +/+

Identities =	1622/1623 (99%), at 27,1-1649,1623, Strand +/+
ss.DNA40370	27 ACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGCTGCTGCTGC
P_AAD12590	1 ACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGCTGCTGCCC
ss.DNA40370	87 GCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGCCAAGGA
P_AAD12590	61 GCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGGCAAGGA
ss.DNA40370	147 AGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGC
P_AAD12590	121 AGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGC
ss.DNA40370	207 CACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCC ******************************
P_AAD12590	181 CACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCC
ss.DNA40370	267 AGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCT ***********************************
P_AAD12590	241 AGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCT
ss.DNA40370	327 CAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGT *********************************
P_AAD12590	301 CAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGT
ss.DNA40370	387 GGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGT *********************************
P_AAD12590	361 GGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGT
ss.DNA40370	447 GGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC *********************************
P_AAD12590	421 GGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC
ss.DNA40370	507 AGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCT ********************************
P_AAD12590	481 AGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCT
ss.DNA40370	567 AGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTT *********************
P_AAD12590	541 AGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTT
ss.DNA40370	627 GGGTGATTCCTGGATCTCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAG
P_AAD12590	601 GGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAG
ss.DNA40370	687 CATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACT
P_AAD12590	661 CATGTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACT
ss.DNA40370	747 GAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAAT

F	_AAD12590	721	${\tt GAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAAT}$
S	s.DNA40370	807	GATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACTCC
P	P_AAD12590	781	GATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACTCC
s	s.DNA40370	867	CACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGTCA
P	_AAD12590	841	CACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGTCA
	s.DNA40370		GCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATGGCCCCATCAG ************************************
	_AAD12590		GCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATGGCCCCATCAG
	s.DNA40370		AAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACGTCTT *********************************
	_AAD12590		AAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACGTCTT
	s.DNA40370		TGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGCTGGA
	_AAD12590		TGTGAACATGGAGGAGCTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGCTGGA
	s.DNA40370		GGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGG **********************************
	_AAD12590		GGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGG
	s.DNA40370		TCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
P	_AAD12590	1141	TCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
	s.DNA40370	1227	GTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTGTCAAGTCCTA **********************************
P	_AAD12590	1201	GTGGAAGGCCCTGTACAGTGACCCTAAATCTCTGGAAACATCTGCTTTTGTCAAGTCCTA
s	s.DNA40370	1287	CAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGG *******************************
P _.	_AAD12590	1261	CAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGG
s	s.DNA40370	1347	GGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATGGAT
P _.	_AAD12590	1321	GGACATGGCTCTGAAGATGAGACTGGTGACTCAGCAAGAATAGGATGGAT
S	s.DNA40370	1407	GAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCT
P_	_AAD12590	1381	GAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCT
s	s.DNA40370	1467	AGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGCTTCT *********************************
P_	_AAD12590	1441	AGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGCTTCT
ន	s.DNA40370	1527	GCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTAAAAA ****************************
P_	_AAD12590	1501	GCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTAAAAA
ss	s.DNA40370	1587	AACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATGATAATAGATA ****************
P_	_AAD12590	1561	AACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATGATAATAGATA

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ss.DNA40370 1647 TTA
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P_AAD12590 1621 TTA

>28 AX191563 Sequence 85 from Patent WO0149728. DNA, linear, PAT 15-AUG-2001 (1897 bp) [1 seg]

Score = 1619 (3209 bits), Expect = 0.0

Identities = 1622/1623 (99%), at 27,1-1649,1623, Strand +/+

140.101010		1025 (550), de 27,1 1045,1025, Beland 171
ss.DNA40370	27	ACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGCTGCTGCC
AX191563	1	${\tt ACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGTGGTTGCTGCTGCCCCGCGGTGGT$
ss.DNA40370	87	GCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGGCAAGGA *****************
AX191563	61	GCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGGCAAGGA
ss.DNA40370	147	AGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGC ************************************
AX191563	121	${\tt AGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGC}$
ss.DNA40370	207	CACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCC ******************************
AX191563	181	CACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCC
ss.DNA40370	267	AGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCT ***********************************
AX191563	24,1	${\tt AGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCT}$
ss.DNA40370	327	CAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGT *********************************
AX191563	301	CAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGT
ss.DNA40370	387	GGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGT *********************************
AX191563	361	GGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGT
ss.DNA40370	447	GGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC *********************************
AX191563	421	GGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC
ss.DNA40370	507	AGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCT ********************************
AX191563	481	AGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCT
ss.DNA40370	567	AGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTT *********************
AX191563	541	AGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTT
ss.DNA40370	627	GGGTGATTCCTGGATCTCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAG ***********************************
AX191563	601	GGGTGATTCCTGGATCTCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAG
ss.DNA40370	687	CATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACT ***********************************
AX191563	661	CATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACT
ss.DNA40370	747	GAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAAT

AX191563	721	GAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAAT
ss.DNA40370	807	GATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACTCC *********************************
AX191563	781	GATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACTCC
ss.DNA40370	867	CACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGTCA
AX191563	841	CACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTA
ss.DNA40370	927	GCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATGGCCCCATCAG
AX191563	901	GCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATGGCCCCATCAG
ss.DNA40370	987	AAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACGTCTT *********************************
AX191563	961	AAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACGTCTT
ss.DNA40370	1047	TGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGCTGGA
AX191563	1021	TGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGCTGGA
ss.DNA40370	1107	GGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGG
AX191563	1081	GGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGG
ss.DNA40370	1167	TCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
AX191563	1141	TCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
ss.DNA40370	1227	GTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTGTCAAGTCCTA **********************************
AX191563	1201	GTGGAAGGCCCTGTACAGTGACCCTAAATCTCTGGAAACATCTGCTTTTGTCAAGTCCTA
ss.DNA40370	1287	CAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGG
AX191563	1261	CAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGG
ss.DNA40370	1347	GGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATGGAT
AX191563	1321	GGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATGGAT
ss.DNA40370	1407	GAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCT
AX191563	1381	GAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCT
ss.DNA40370	1467	AGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGCTTCT
AX191563	1441	AGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGCTTCT
ss.DNA40370	1527	GCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTAAAAA
AX191563	1501	GCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTAAAAA
ss.DNA40370	1587	AACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATGATAATAGATA
AX191563	1561	AACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAATAAAGGATGATAATAGATA

ss.DNA40370 1647 TTA ***
AX191563 1621 TTA

>29 AF113214 Homo sapiens MSTP034 mRNA, complete cds. (1902 bp) [1 seg] Score = 1594 (3160 bits), Expect = 0.0 Identities = 1594/1594 (100%), at 56,1-1649,1594, Strand +/+

		, , , , , , , , , , , , , , , , , , , ,
ss.DNA40370	56	CTCCCGTCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGCT
AF113214	1	CTCCCGTCCCGCGGTGGTTGCTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTG
ss.DNA40370	116	TCATTGACTGGCCCACAGAGGAGGCCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGG
AF113214	61	TCATTGACTGGCCCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGG
ss.DNA40370	176	ATGCCTACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAAC
AF113214	121	ATGCCTACATGTTCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAAC
ss.DNA40370	236	TGCCCCTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACT **********************************
AF113214	181	TGCCCCTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACT
ss.DNA40370	296	TTGAGGAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGG **********************************
AF113214	241	TTGAGGAAATTGGGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGG
ss.DNA40370	356	CTGCCAGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTA ***********************
AF113214	301	CTGCCAGTCTCCTATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTA
ss.DNA40370	416	GTGGTGCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGA *********************************
AF113214	361	GTGGTGCCTATGCCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGA
ss.DNA40370	476	CCTTCTTCAGTTGCCACAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCT
AF113214		CCTTCTTCAGTTGCCACAAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCT
ss.DNA40370	536	ATGGAGGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGA
AF113214		ATGGAGGAAAAATGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGA
ss.DNA40370	596	CCATCAAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATT
AF113214		CCATCAAGTGCAACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATT
ss.DNA40370	656	CGGTGCTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGG
AF113214		CGGTGCTCTCCTGGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGG
ss.DNA40370	716 (CAGAGGTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAG
AF113214		CAGAGGTGTCTAAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAG
ss.DNA40370	776 I	AGGCCACAGAGCTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGA

AF113214	721	AGGCCACAGAGCTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGA
ss.DNA40370	836	ACTTCTATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAAT
AF113214	781	ACTTCTATAACATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAAT
ss.DNA40370	896	TCACACAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATG
AF113214	841	TCACACAGAGCCACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATG
ss.DNA40370	956	CCTTAAGCCAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATC
AF113214	901	CCTTAAGCCAGCTCATGAATGGCCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATC
ss.DNA40370	1016	AATCCTGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGC
AF113214	961	AATCCTGGGGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGC
ss.DNA40370	1076	CAGTCATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATG
AF113214	1021	CAGTCATTAGCATTGTGGACGAGTTGCTGGAGGCAGGGATCAACGTGACGGTGTATAATG
ss.DNA40370	1136	GACAGCTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGT
AF113214	1081	GACAGCTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGT
ss.DNA40370	1196	GGCCAGAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAAT ******************************
AF113214	1141	GGCCAGAACTGCCTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAAT
ss.DNA40370	1256	CTTTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGA ************************************
AF113214	1201	CTTTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGA
ss.DNA40370	1316	AAGCTGGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGG ***********************************
AF113214	1261	AAGCTGGTCATATGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGG
ss.DNA40370	1376	TGACTCAGCAAGAATAGGATGGGTGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACA
AF113214	1321	TGACTCAGCAAGAATAGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACA
ss.DNA40370	1436	GAGCTGAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGG
AF113214	1381	GAGCTGAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGG
ss.DNA40370	1496	GCTGTGATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGG
AF113214	1441	GCTGTGATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGG
ss.DNA40370	1556	CAATTTGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTG
AF113214	1501	CAATTTGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTG
ss.DNA40370		TTTTGATCAAAATAAAGGATGATAATAGATATTA *************
AF113214	1561	TTTTGATCAAAATAAAGGATGATAATAGATATTA

```
>30 P AAC75884 Human ORFX ORF1439 polynucleotide sequence SEQ ID NO:2877. (1921
bp) [1 seg]
 Score = 1543 (3059 bits), Expect = 0.0
 Identities = 1619/1642 (98%), Gaps = 3/1642 (0%), at 8,2-1649,1640, Strand +/+
ss.DNA40370
               8 GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGCGACTGCGGCGCTCTCCCGTCCCGC
                ********************
              2 GCTGATGCTGCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGC
P AAC75884
ss.DNA40370
              68 GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
                ******************
P AAC75884
             62 GGTGGTTGCTGCTGCCGCTGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGC
ss.DNA40370
            128 CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
P AAC75884
             122 CCACAGAGGAGGCAAGGAAGTATGGGATTATGTGACGGTCCGCAAGGATGCCTACATGT
ss.DNA40370
             188 TCTGGTGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCA
                P AAC75884
             182 TCTGGTGGCTCTATTATGCCACCA-CTCCTGCAAGAACTTC--AGAACTGCCCCTGGTCA
ss.DNA40370
             248 TGTGGCTTCAGGGGGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
                *******************
P AAC75884
             239 TGTGGCTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTG
ss.DNA40370
             308 GGCCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
                ******************
P AAC75884
             299 GGCCCTTGACAGTGATCTCAAACCACGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCC
ss.DNA40370
             368 TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
                *****************
P AAC75884
             359 TATTTGTGGATAATCCCGTGGGCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCTATG
ss.DNA40370
             428 CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
                *******************
P AAC75884
             419 CCAAGGACCTGGCTATGGTGGCTTCAGACATGATGGTTCTCCTGAAGACCTTCTTCAGTT
ss.DNA40370
             488 GCCACAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
P AAC75884
             479 GCCACAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA
ss.DNA40370
             548 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
P AAC75884
             539 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA
ss.DNA40370
             608 ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT
                *****************
P AAC75884
             599 ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCCTC
ss.DNA40370
             668 GGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
                *************
P AAC75884
             659 GGGGACCTTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTA
ss.DNA40370
             728 AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGC
                ******************
P AAC75884
            719 AGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGC
```

ss.DNA40370	788	TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
P_AAC75884 .	779	TGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACA
ss.DNA40370	848	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
P_AAC75884	839	TCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCC
ss.DNA40370	908	ACCTAGTTTGTCTTTGTCAGCGCCACGTGAGACACCTACAACGAGATGCCTTAAGCCAGC
P_AAC75884	899	ACCTAGTTTGTCTCTGTCAGCGCCACGTGAGACACCTACAACGAGACGCCTTAAGCCAGC
ss.DNA40370	968	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
P_AAC75884	959	TCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAG
ss.DNA40370	1028	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCA ***********************************
P_AAC75884	1019	GCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATCGACA
ss.DNA40370	1088	******
P_AAC75884		TTGTGGATACGTTGCTGGAGGCAGGGGTCAATGTGACTGTGTATAATGGGCAGCTGGATC
ss.DNA40370		TCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGC *** ** ** ***** *********************
P_AAC75884		TCATTGTGGACACCATAGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGT
ss.DNA40370		CTAAATTCAGTCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT * * **** * **************************
P_AAC75884		CCAGATTCAATCAGCTGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACAT
ss.DNA40370		CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
P_AAC75884		CTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATA
ss.DNA40370		TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
P_AAC75884 ss.DNA40370	•	TGGTTCCTTCTGACCAAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAG
P AAC75884		AATAGGATGGATGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
ss.DNA40370		AATAGGATGGATGGGGCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGA
P AAC75884		GGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG ***********************************
ss.DNA40370		GGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAG
P AAC75884		AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT ****************************
ss.DNA40370		AAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAAT
P_AAC75884		TATTTCTGCTTCTTAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA ********************************
ss.DNA40370		TATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAATTGATTTGTTTTGATCAAAA TAAAGGATGATAATAGATATTA
20.DIA=03/0		1AAAGGATGATAATAGATATTA *****************

P AAC75884 1619 TAAAGGATGATAATAGATATTA

>31 P_ABK30363 Human G-protein-coupled protease #133. cDNA, PAT 23-APR-2002 (1960 bp) [1 seq] Score = 1407 (2789 bits), Expect = 0.0Identities = 1620/1658 (97%), Gaps = 26/1658 (1%), at 17,11-1649,1667, Strand +/+ 17 GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGT-GGTTG ss.DNA40370 **************** P ABK30363 11 GCCGTGCGGTACTTGTCATGGAGCTGGCACTGCGGCGCTCTCCCGTCCCGCGGAAGGATG ss.DNA40370 76 CTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAG ****************** P ABK30363 71 CTGCTGCTGCCGCTGCTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAG ss.DNA40370 136 GAGGGCAAGG--AAGTAT-GGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGG ******* P ABK30363 131 GAGGGCAAGGGAACTTATGGGGATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGG ss.DNA40370 193 TGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGG ********************* P ABK30363 191 TGGCTCTATTATGCCACCAACTCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGG 253 CTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCC ss.DNA40370 ********************** P ABK30363 251 · CTTCAGGGCGGTCCAGGCGGTTCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCC ss.DNA40370 313 CTTGACAGTGATCTCAAACCAC-GGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATT *************** P ABK30363 311 CTTGACAGTGATCTCAAACCACGGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATT ss.DNA40370 372 TGTGGATAATCCCGT-GGGCACTGGGTTCAGTTATGTGAATGGT-AGTGGTGCCTATGCC P ABK30363 371 TGTGGATAATCCCGTAGGGCACTGGGTTCAGTTATGTGAATGGTAAGTGGTGCCTATGCC ss.DNA40370 ${\tt 430\ AAGGACCTGGC-TATGGTGGCTTCAGACAT-GATGGTTCTCCTGAAGACCTTCTTCAGTT}$ P ABK30363 431 AAGGACCTGGCTTATGGTGGCTTCAGACATGGATGGTTCTCCTGAAGACCTTCTTCAGTT ss.DNA40370 488 GCCACAAGAATTCCAGACAGTTCCATTCTACATTTTCTCAGAGTCCTATGGAGGAAAAA ******************** P ABK30363 491 GCCACAAGAATTCCAGACAGTTCCATTCTACATTTTTTCAGAGTCCTATGGAGGAAAAA ss.DNA40370 548 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA P ABK30363 551 TGGCAGCTGGCATTGGTCTAGAGCTTTATAAGGCCATTCAGCGAGGGACCATCAAGTGCA ss.DNA40370 608 ACTTTGCGGGGGTTGCCTTGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT **************** P ABK30363 611 ACTTTGCGGGGGTTGCCTTGGGTGAATCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCT ss.DNA40370 668 GGGGACC-TTACCTGTACAGCATGTCTCTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCT ****** *************** P ABK30363 671 GGGGACCATTACCTGTACAGCATGTCTCTCTCGAAGACAAAGGTCTGGCAGAGGTGTCT ss.DNA40370 727 AAGGTTGCAGAGCAAGTACTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAG ************

P_ABK30363	731 AAGGTTGCAGAGCAAGT-CTGAATGCCGTAAATAAGGGGCCTCTACAGAGAGGCCACAGAG
ss.DNA40370	787 CTGTGGGGGAAAGCAGAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTA-TAA
P_ABK30363	790 CTGTGGGGGAAAGCAGAAATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATTAA
ss.DNA40370	846 CATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTC-TAGAATTCACACAGA
P_ABK30363	850 CATCTTAACTAAAAGCACTCCCACGTCTACAATGGAGTCGAGTCTTAGAATTCACACAGA
ss.DNA40370	905 GCCACCTAGTTTGTCTTGTCAGCGCCACGTG-AGACACCTACAACGAGATGCCTTAAGC
P_ABK30363	910 GCCACCTAGTTTGTCTTGTCAGCGCCACGTGAAGACACCTTACACGAGATGCCTTAAGC
ss.DNA40370	964 CAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGG
P_ABK30363	970 CAGCTCATGAATGGCCCCATCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGG
ss.DNA40370	1024 GGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATT
P_ABK30363	1030 GGAGGCCAGGCTACCAACGTCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATT
ss.DNA40370	1084 AGCATTGTGGA-CGAGTTGCTGGAGGCAGGGATCAA-CGTGA-CGGTGTA-TAATGGAC-
P_ABK30363	1090 AGCATTGTGGACCAAGTTGCTGGAGGCAGGGATCAACCGTGACCGGTGTATTAATGGACA
ss.DNA40370	1139 AGC-TGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGG
P_ABK30363	1150 AGCTTGGATCTCATCGTAGATACCATGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGG
ss.DNA40370	1198 CCAGAACTGCCTAAATTCAGTCAGCTGAAGT-GGAAGGCCCTGTACAGTGACCCTAAATC
P_ABK30363	1210 CCAGAACTGCCTAAATTCAGTCAGCTGAAGTGGGAAGGCCCTGTACAGTGACCCTAAATC
ss.DNA40370	1257 TTTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAA ***********************************
P_ABK30363	1270 TTTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAACCTTGCTTTCTACTGGATTCTGAA
ss.DNA40370	1317 AGCTGGTCATATGGTTCCTTCTGACCAA-GGGGACATGGCTCTGAAGATGATGAGACTGG ***********************************
P_ABK30363	1330 AGCTGGTCATATGGTTCCTTCTGACCAAGGGGGACATGGCTCTGAAGATGATGAGACTGG
ss.DNA40370	1376 TGACTCAGCAAGAATAGGATGGATGGGGCTGGAGATGAGCTGGTT-TGGCCTTGGGGCAC ********************************
P_ABK30363	1390 TGACTCAGCAAGAATAGGATGGGTGGGGCTGGAGATGAGCTGGTTATGGCCTTGGGGCAC
ss.DNA40370	1435 AGAGCTGAGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAAC-TG
P_ABK30363	1450 AGAGCTGAGGCCGCTGAAGCTGTAGGAAGCGCCATTCTTCCCTGTATCTAACTTG
ss.DNA40370	1494 GGGCTGTGATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCA-TTGTCTCTGG
P_ABK30363	1510 GGGCTGTGATCAAGAAGGTTCTGACCAGCTTCTGCAGAGGATAAAATCATTTGTCTCTGG
ss.DNA40370	1553 AGGCAATTTGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAA-TTGA
P_ABK30363	1570 AGGCAATTTGGAAATTATTTCTGCTTCTTAAAAAAACCTAAGATTTTTTAAAAAAATTTGA

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ss.DNA40370 1612 TTTGTTTTGATCAAAATAAAGGATGATAATAGATATTA
               ** **** *************
P ABK30363
           1630 TTCGTTTCGATCAAAATAAAGGATGATAATAGATATTA
>32 P_AAH89926 Human bone marrow cDNA, SEQ ID NO: 57. cDNA, PAT 01-OCT-2001
(1940 bp) [1 seg]
 Score = 1389 (2753 bits), Expect = 0.0
 Identities = 1577/1629 (96%), Gaps = 13/1629 (0%), at 34,10-1649,1638, Strand
+/+
ss.DNA40370
            P AAH89926
            10 ATGGAGCTGCCACTGCGGCGCTCTCCCGTTCCGCTGTGGTTGCTGGAGCTGCCGCTGCTA
ss.DNA40370
            94 CTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGAGGAAGTATGG
               ********** **** ****** ****
P AAH89926
            70 CTGGGCCTGAACGCAAGAGCTGTCATTGACTGCCCCACAGAGGAGGGCCAAGGAACCATGG
ss.DNA40370
            154 GATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGCCACCAAC
               P AAH89926
            130 GATTATGTGACGGTTCGCAAGGATGCCTACATGTTCTGGTGGGTATATTATGCCACCAAC
ss.DNA40370
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               P AAH89926
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ss.DNA40370
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               **** ************ ******************
P AAH89926
            250 TCTAACACTGGATTTGGAAACTCTGAGGAAATTGGGCCCCTTGACAGTGATCTCAAACCA
ss.DNA40370
            334 CGGAAAACCACCTGG-----CTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGTGG
               **********
P AAH89926
            310 CGGAAAACCACCTGGGTACACTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGTGG
ss.DNA40370
            389 GCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCC-TATGCCAAGGACCTGGCTATGGTG
               *****************
P AAH89926
            370 GCACTGGGTTCAGTTATGTGAATGGTAGTGGTGCCCTATGCCAAGGACCTGGCTATGGTG
ss.DNA40370
            448 GCTTCAGACATGATGG-TTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC
               ************
P AAH89926
            430 GCTTCAGACATGATGGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGAC
ss.DNA40370
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P AAH89926
            490 AGTTCCATTGTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCT
ss.DNA40370
            567 AGAGCTTTATAAGGCCATTCAGCGAGGGACC-ATCAAGTGCAACTTTGCGGGGGGTTGCCT
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P AAH89926
            550 AGAGCTTTATAAGGCCATTCAGCGAGGGACCCATAAAGTGCAACTTTGCGGGGGGTTGCCT
ss.DNA40370
            626 TGGGTGATTCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACA
               P AAH89926
            610 TGGGTGATTCCTGAATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACA
ss.DNA40370
            686 GCATGTCTCTT-CTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTA
               P AAH89926
           670 GCATGTCTCTTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTA
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ss.DNA40370	745	CTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAA
P_AAH89926	730	CTGAATGCCGTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAA
ss.DNA40370	805	ATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACT
P_AAH89926	790	ATGATCATTGAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACT
ss.DNA40370	865	CCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGT
P_AAH89926	850	CCCACGTCTACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGT
ss.DNA40370	925	CAGCGCCACGTGAGACACCTACAACGAGATGC-CTTAAGCC-AGCTCATGAATGGCCCCA
P_AAH89926	910	CAGCGCCACGTGAGACACCTACAACGATATGCACCTAAGCCTATTTCATGAACGGCCCCA
ss.DNA40370	983	TCAGAAAGAAGCTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACG
P_AAH89926	970	*** ***** * **************************
ss.DNA40370	1043	TCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGC
P_AAH89926	1030	TCTTTGTGAACATGGAGGAGGACTTCATGAAGCCAGTCATTAACATTGTGGACGAGTTGC
ss.DNA40370	1103	TGGAGGCAGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCA
P_AAH89926	1090	TGGAGGCAGGGATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTACATACCA
ss.DNA40370	1163	TGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
P_AAH89926	1150	TGGGTCAGGAGGCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
ss.DNA40370	1223	TGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTGTCAAGT
P_AAH89926	1210	TGAAGTGGAAGGCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTGTCAAGT
ss.DNA40370	1283	CCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACC
P_AAH89926	1270	CCTACAAGAACCTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACC
ss.DNA40370	1343	AAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATGGAT
P_AAH89926		AAGGGGACATGGCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAGGATGGG
ss.DNA40370	1403	GCTGGAGATGAGCTGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGCCGCTGAAGCTGT **********************************
P_AAH89926		GCTGGAGATGAGCCGGTTTGGCCTTGGGGCACAGAGCTGAGCTGAGGCCGCTGAAGCTGT
ss.DNA40370	1463	AGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGC
P_AAH89926		AGGAAGCGCCATTCTTCCCTGTATCTAACTGGGGCTGTGATCAAGAAGGTTCTGACCAGC
ss.DNA40370	1523	TTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTA
P_AAH89926		TTCTGCAGAGGATAAAATCATTGTCTCTGGAGGCAATTTGGAAATTATTTCTGCTTCTTA
ss.DNA40370	1583	AAAAA-CCTAAGA-TTTTTTAAAAATTGATTTGTTTTGATCAAAATAAAGGATGATAA

```
P AAH89926
            1570 AAAAAACCCTAAGATTTTTTTAAAAAATTGATTATTTTTGATCAAACCAAAGGATGATAA
 ss.DNA40370
            1641 TAGATATTA
                ******
 P AAH89926
            1630 TAGATATTA
 >33 AX191553 Sequence 75 from Patent WO0149728. DNA, linear, PAT 15-AUG-2001
 (1359 bp) [1 seg]
 Score = 1355 (2686 bits), Expect = 0.0
 Identities = 1358/1359 (99%), at 34,1-1392,1359, Strand +/+
 ss.DNA40370
              ********************
  AX191553
               ss.DNA40370
              94 CTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGGCCAAGGAAGTATGG
                *********************
  AX191553
              61 CTGGGCCTGAACGCAGGAGCTGTCATTGACTGGCCCACAGAGGAGGGCCAAGGAAGTATGG
ss.DNA40370
             154 GATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGCCACCAAC
                ********************
             121 GATTATGTGACGGTCCGCAAGGATGCCTACATGTTCTGGTGGCTCTATTATGCCACCAAC
  AX191553
ss.DNA40370
             214 TCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGT
                *******************
  AX191553
             181 TCCTGCAAGAACTTCTCAGAACTGCCCCTGGTCATGTGGCTTCAGGGCGGTCCAGGCGGT
ss.DNA40370
             274 TCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCTCAAACCA
                ******************
  AX191553
            241 TCTAGCACTGGATTTGGAAACTTTGAGGAAATTGGGCCCCTTGACAGTGATCTCAAACCA
            334 CGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGTGGGCACT
ss.DNA40370
                ************
  AX191553
            301 CGGAAAACCACCTGGCTCCAGGCTGCCAGTCTCCTATTTGTGGATAATCCCGTGGGCACT
ss.DNA40370
            394 GGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGTGGCTTCA
                *******
 AX191553
            361 GGGTTCAGTTATGTGAATGGTAGTGGTGCCTATGCCAAGGACCTGGCTATGGTGGCTTCA
            454 GACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGACAGTTCCA
ss.DNA40370
 AX191553
            421 GACATGATGGTTCTCCTGAAGACCTTCTTCAGTTGCCACAAAGAATTCCAGACAGTTCCA
ss.DNA40370
            514 TTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCTAGAGCTT
                               *************
 AX191553
            481 TTCTACATTTTCTCAGAGTCCTATGGAGGAAAAATGGCAGCTGGCATTGGTCTAGAGCTT
ss.DNA40370
            574 TATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTTGGGTGAT
                ************************
 AX191553
            541 TATAAGGCCATTCAGCGAGGGACCATCAAGTGCAACTTTGCGGGGGTTGCCTTGGGTGAT
ss.DNA40370
            634 TCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAGCATGTCT
                **********************
 AX191553
            601 TCCTGGATCTCCCCTGTTGATTCGGTGCTCTCCTGGGGACCTTACCTGTACAGCATGTCT
ss.DNA40370
            694 CTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACTGAATGCC
               *********************
 AX191553
            661 CTTCTCGAAGACAAAGGTCTGGCAGAGGTGTCTAAGGTTGCAGAGCAAGTACTGAATGCC
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ss.DNA40370	754	GTAAATAAGGGGCTCTACAGAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAATGATCATT
AX191553	721	GTAAATAAGGGGCTCTACAGAGGCCACAGAGCTGTGGGGGAAAGCAGAAATGATCATT
ss.DNA40370	814	GAACAGAACACAGATGGGGTGAACTTCTATAACATCTTAACTAAAAGCACTCCCACGTCT
AX191553	781	**************************************
ss.DNA40370	874	ACAATGGAGTCGAGTCTAGAATTCACACAGAGCCACCTAGTTTGTCTTTGTCAGCGCCAC
AX191553	841	**************************************
ss.DNA40370	934	GTGAGACACCTACAACGAGATGCCTTAAGCCAGCTCATGAATGGCCCCCATCAGAAAGAA
AX191553	901	**************************************
ss.DNA40370	994	CTCAAAATTATTCCTGAGGATCAATCCTGGGGAGGCCAGGCTACCAACGTCTTTGTGAAC
AX191553	961	**************************************
ss.DNA40370	1054	ATGGAGGAGGACTTCATGAAGCCAGTCATTAGCATTGTGGACGAGTTGCTGGAGGCAGGG
AX191553	1021	**************************************
ss.DNA40370	1114	ATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGGTCAGGAG
AX191553	1081	ATCAACGTGACGGTGTATAATGGACAGCTGGATCTCATCGTAGATACCATGGGTCAGGAG
ss.DNA40370	1174	GCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
AX191553	1141	GCCTGGGTGCGGAAACTGAAGTGGCCAGAACTGCCTAAATTCAGTCAG
ss.DNA40370	1234	GCCCTGTACAGTGACCCTAAATCTTTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAAC
AX191553	1201	GCCCTGTACAGTGACCCTAAATCTCTGGAAACATCTGCTTTTGTCAAGTCCTACAAGAAC
ss.DNA40370	1294	CTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGGGGACATG
AX191553	1261	CTTGCTTTCTACTGGATTCTGAAAGCTGGTCATATGGTTCCTTCTGACCAAGGGGACATG
ss.DNA40370	1354	GCTCTGAAGATGATGAGACTGGTGACTCAGCAAGAATAG
AX191553	1321	GCTCTGAAGATGATGAGCTGGTGACTCAGCAAGAATAG

GenBank (Release 134, feb 2003)

```
P AAF30502 Human PRO302 cDNA clone DNA40370-1217. 650 bp,
          CDNA, PAT 29-MAY-2001
ACCESSION
            P AAF30502
KEYWORDS
            PRO302; vitellogenic carboxypeptidase homologue; human;
          angiogenesis; cardiovascularisation; trauma; wound; cancer;
          atherosclerosis; cardiac hypertrophy; macular degeneration;
          cardiant; antiangiogenic; antiarteriosclerotic; hypotensive;
          antirheumatic; antiarthritic; antiinflammatory; vulnerary;
          antitumour; diagnosis; gene therapy; patent; GENESEQ patentdb.
SOURCE
            Homo sapiens.
  ORGANISM Homo sapiens.
REFERENCE
               (bases 1 to 1650)
            Fong, S., Gerritsen, M.E., Goddard, A.,
  AUTHORS
                                                    Gurney, A.L., Hillan, K.J.
          Williams, P.M., Wood, W.I.
  TITLE
            Composition comprising a PRO230, PRO216 or PRO302 polypeptide,
          agonist or antagonist for promoting or inhibiting angiogenesis
          and/or cardiovascularisation in mammals -
  JOURNAL
            Patent: WO200119987-A1; Filing Date: 29-NOV-1999;
          Publication Date: 22-MAR-2001; Priority: 13-SEP-1999;
          99WO-US20944. 15-SEP-1999;
                                      99WO-US21090; Assignee: (GETH )
          GENENTECH INC; Cross Reference: WPI; 2001-235264/24. P-PSDB;
          AAB20341; Patent Format: Claim 56; Fig 5; 141pp; English.
COMMENT
            The present sequence is that of cDNA clone DNA40370-1217 (ATCC
          209485) encoding human PRO302 (see AAB20341), a vitellogenic
          carboxypeptidase homologue. The cDNA was isolated following
          expressed sequence tag database searches using extracellular domains
          of about 950 known secreted sequences, use of isolated sequences to
          design PCR primers and probe (see AAF30509-12), screening of cDNA
          libraries, and isolation from a foetal lung tissue library. PRO302
          is 1 of 3 novel PRO proteins of the invention. PRO230, PRO216 and
          PRO302 polynucleotides and polypeptides, recombinant retroviral
          particles, ex vivo producer cells, expression vectors, host cells,
          and methods of recombinant production are provided, as well as
          antibodies, agonists and antagonists. The polynucleotides,
          polypeptides, agonists and antagonists are useful for treating or
          diagnosing a cardiovascular, endothelial or angiogenic disorder in a
          mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related
          macular degeneration (all claimed), atherosclerosis, hypertension,
          arterial restenosis, rheumatoid arthritis, angina, myocardial
          infarction, thrombophlebitis and lymphangitis. The polypeptides,
          agonists and antagonists are also used in claimed methods of
          stimulating or inhibiting endothelial cell growth.
FEATURES
                     Location/Qualifiers
     CDS
                     34..1392
                   /*tag= a
     sig peptide
                     34..108
                   /*tag= b
                     109..1389
     mat peptide
                   /*tag= c
BASE COUNT
                                  453 g · 418 t
                414 a
                         365 c
ORIGIN
P AAA13199 PRO302, vitellogenic carboxypeptidase homologue nucleotide sequence.
```

P_AAA13199 PRO302, vitellogenic carboxypeptidase homologue nucleotide sequence
650 bp, cDNA, PAT 20-JUL-2000
ACCESSION P AAA13199

KEYWORDS Human; PRO302; Vitellogenic carboxypeptidase; cardiant; angiogenic;

cytostatic; ophthalmic; antiproliferative activity; ss; cardiovascular; endothelial; angiogenic disorder; cardiac hypertrophy; trauma; cancer; myocardial infarction; age-related macular degeneration; patent; GENESEQ patentdb. Homo sapiens.

SOURCE ORGANISM Homo sapiens.

REFERENCE (bases 1 to 1650)

Fong, S., Gerritsen, M.E., Goddard, A., Gurney, A.L., Hillan, K.J. AUTHORS Williams, P.M., Wood, W.I.

TITLE A composition comprising PRO230, PRO216 or PRO302 polypeptides, agonists or antagonists useful for promotion or inhibition of cardiovascularisation, angiogenesis or endothelialisation in mammals

JOURNAL Patent: WO200015792-A2; Filing Date: 13-SEP-1999; 99WO-US20944; Publication Date: 23-MAR-2000; Priority: 14-SEP-1998; 98US-0100262. 14-SEP-1998; 98WO-US19177; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 2000-271431/23; Patent Format: Example 3; Fig 5; 135pp; English.

COMMENT

This sequence represents the nucleotide sequence encoding a human PRO302 protein. PRO302 is a human vitellogenic carboxypeptidase homologue. The invention relates to a composition comprising a PRO230 (tubulointerstitial nephritis antigen homologue), PRO216 (osteomodulin/fibromodulin homologue) or PRO302 (vitellogenic carboxypeptidase homologue) polypeptide, or an agonist or antagonist of these. Also included in the invention is a method for preparing the composition, agonists and antagonists of PRO230, PRO216 or PRO302, and antibodies that bind to a PRO230, PRO216 or PRO302 polypeptides. The composition of the invention has cardiant, angiogenic, cytostatic, ophthalmic, and antiproliferative activity. Analysis of the level of expression of a gene encoding a PRO230, PRO216 or PRO302 polypeptide or detecting the presence/absence of the polypeptide is useful for diagnosis of cardiovascular, endothelial or angiogenic disorders in mammals. Anti-PRO230, PRO216 or PRO302 antibodies are useful in these diagnostic methods. The PRO230, PRO216 or PRO302 polypeptides (and their coding sequences), agonists and antagonists are useful for treatment of cardiovascular, endothelial or angiogenic disorders, especially cardiac hypertrophy (especially characterized by presence of an elevated level of PGF-2alpha), trauma or cancer, myocardial infarction or age-related macular degeneration. In particular, PRO216, an agonist of PRO216, an antagonist of PRO230, PRO216 or PR302 or an anti-PRO216 antibody is useful for inhibition of endothelial cell growth in a mammal. Endothelial cell growth can be stimulated by administration of PRO230, a PRO230 agonist or antagonist or an anti-PRO230 antibody. Additionally, an anti-PRO302 antibody can inhibit angiogenesis induced by PRO302 in a mammal.

FEATURES

Location/Qualifiers

CDS

34..1392 /*tag= /product= PRO302

/note= "Vitellogenic carboxypeptidase homologue"

BASE COUNT 414 a 365 c 453 g 418 t

ORIGIN

P_AAX52258 Protein PRO302 cDNA clone DNA40370-1217. 650 bp, DNA, PAT 25-JUN-1999

ACCESSION P AAX52258

KEYWORDS Secreted protein; transmembrane protein; human; enterocolitis;

Zollinger-Ellison syndrome; gastrointestinal ulceration; congenital microvillus atrophy; skin disease; cell growth; abnormal keratinocyte differentiation; psoriasis; epithelial cancer; Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic; wound healing; tissue repair; patent; GENESEQ patentdb. SOURCE Homo sapiens. ORGANISM Homo sapiens. REFERENCE 1 (bases 1 to 1650) Chen, J., Goddard, A., Gurney, A.L., Pennica, D., Wood, W.I., **AUTHORS** Yuan, J. TITLE New isolated human genes and polypeptides used in, e.g. treatment of gastrointestinal ulceration JOURNAL Patent: WO9914328-A2; Filing Date: 16-SEP-1998; 98WO-US19330; Publication Date: 25-MAR-1999; Priority: 25-NOV-1997; 97US-0059113. 17-SEP-1997; 97US-0066840. 17-SEP-1997; 97US-0059115. 17-SEP-1997; 97US-0059117. 17-SEP-1997; 97US-0059119. 17-SEP-1997; 97US-0059121. 17-SEP-1997; 97US-0059122. 17-SEP-1997; 97US-0059184. 18-SEP-1997; 97US-0059263. 18-SEP-1997; 97US-0059266. 15-OCT-1997; 97US-0062125. 17-OCT-1997; 97US-0062285. 17-OCT-1997; 97US-0062287. 21-OCT-1997; 97US-0063486. 24-OCT-1997; 97US-0062814. 24-OCT-1997; 97US-0062816. 24-OCT-1997; 97US-0063045. 24-OCT-1997; 97US-0063120. 24-OCT-1997; 97US-0063121. 24-OCT-1997; 97US-0063127. 24-OCT-1997; 97US-0063128. 27-OCT-1997; 97US-0063329, 27-OCT-1997; 97US-0063327. 28-OCT-1997; 97US-0063541. 28-OCT-1997; 97US-0063542. 28-OCT-1997; 97US-0063544. 28-OCT-1997; 97US-0063549. 28-OCT-1997; 97US-0063550. 28-OCT-1997; 97US-0063564. 29-OCT-1997; 97US-0063435. 29-OCT-1997; 97US-0063704. 29-OCT-1997; 97US-0063732. 29-OCT-1997; 97US-0063738. 29-OCT-1997; 97US-0063734. 29-OCT-1997; 97US-0064215. 29-OCT-1997; 97US-0063735. 31-OCT-1997; 97US-0063870. 31-OCT-1997; 97US-0064103. 03-NOV-1997; 97US-0064248. 07-NOV-1997; 97US-0064809. 12-NOV-1997; 97US-0065186. 17-NOV-1997; 97US-0065846. 18-NOV-1997; 97US-0065693. 21-NOV-1997; 97US-0066120. 21-NOV-1997; 97US-0066772. 24-NOV-1997; 97US-0066364. 24-NOV-1997; 97US-0066466. 24-NOV-1997; 97US-0066770. 24-NOV-1997; 97US-0066511. 24-NOV-1997; 97US-0066453; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 1999-229533/19. P-PSDB; AAY13387; Patent Format: Claim 2; Fig 89; 320pp; English. COMMENT AAX52213-74 encode secreted and transmembrane human proteins, and are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, ALS,

neuropathies or cancer. PRO265 can be used as for fibromodulin, e.g.

0

for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of genital tract.

FEATURES

Location/Qualifiers

BASE COUNT

414 a 365 c 453 g 418 t

ORIGIN

P AAX25445 Human PRO216 cDNA clone UNQ265. 650 bp, cDNA, PAT 19-JUL-1999 ACCESSION P AAX25445

KEYWORDS

PRO302; vitellogenic carboxypeptidase; human; angiogenesis; cardiovascularisation; wound healing; cancer; atherosclerosis; cardiac hypertrophy; myocardial infarction; antiangiogenic; antitumour; tissue regeneration; pulmonary fibrosis; neurological disease; macular degeneration; diagnosis; therapy; patent; GENESEQ patentdb.

SOURCE

Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE

1 (bases 1 to 1650)

AUTHORS

Fong,S., Gerritsen,M.E., Goddard,A., Gurney,A.L., Hillan,K.
Williams,P.M., ,W.odwi;

TITLE

Composition containing human polypeptides with anti-angiogenic activity

JOURNAL

Patent: WO9914234-A2; Filing Date: 14-SEP-1998; 98WO-US19177; Publication Date: 25-MAR-1999; Priority: 24-NOV-1997; 97US-0066772. 17-SEP-1997; 97US-0059117. 27-OCT-1997; 97US-0063329; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 1999-254381/21. P-PSDB; AAY05768; Patent Format: Example 1; Fig 8; 102pp; English.

COMMENT

This is the DNA sequence of human cDNA clone UNQ265 or DNA40370-1217 (ATCC 209485), which encodes PRO302, identified as a vitellogenic carboxypeptidase homologue (see AAY05768). The cDNA clone was isolated from a human foetal kidney tissue cDNA library using a probe and primers (see AAX25456-59) based on a consensus sequence (see AAX25449) for PRO302 that had been deduced from a set of overlapping EST clones (see AAX25446-48). Compositions containing PRO302, PRO216 (human osteomodulin, see AAY05767) and PRO230 in admixture with a carrier are claimed. The compositions are used to treat or prevent a wide range of cardiovascular, endothelial and angiogenic disorders (claimed), specifically cardiac hypertrophy (especially where associated with elevated levels of prostaglandin F2 alpha or induced by myocardial infarction), trauma (wounds, burns, or tissue regeneration more generally, including neurological disease), and cancer. Antagonists may be used similarly, also to treat age-related macular degeneration (or other angiogenic retinal disorders) and to prevent excessive growth of connective tissue during wound healing or in pulmonary fibrosis.

FEATURES

Location/Qualifiers

CDS

34..1392 /*tag= a

sig_peptide

34..108

J_1 -

/*tag= b

mat_peptide

109..1289

/*tag= c

BASE COUNT 414 a 365 c 453 g 418 t ORIGIN

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P AAF72416
           Human PRO302 cDNA. 650 bp, cDNA, PAT 24-APR-2001
ACCESSION
            P AAF72416
            Human; PRO; dermatological; antipsoriatic; cytostatic;
KEYWORDS
          antiinflammatory; antiparkinsonian nootropic; neuroprotective;
          vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic;
          antirheumatic; cancer; antiarthritic; antiinfertility; antidiabetic;
          antiviral; diabetes; ophthalmological; gene therapy; skin disease;
          gastrointestinal disorder; ischaemia; inflammation; patent; GENESEQ
          patentdb.
            Homo sapiens.
SOURCE
  ORGANISM Homo sapiens.
REFERENCE
               (bases 1 to 1650)
            Ashkenazi, A.J., Botstein, D., Desnoyers, L., Eaton, D.L.,
  AUTHORS
          Ferrara, N. Filvaroff, E., Fong, S., Gao, W., Gerber, H.,
          Gerritsen, M.E., Goddard, A. Godowski, P.J., Grimaldi, C.J.,
          Gurney, A.L., Hillan, K.J., Kljavin, I.J. Mather, J.P., Pan, J.,
          Paoni, N.F., Roy, M.A., Stewart, T.A., Tumas, D. Williams, P.M.,
          Wood, W.I.
            Sixty one nucleic acids encoding PRO polypeptides which are useful
  TITLE
          in the treatment of skin diseases (e.g. psoriasis), cancers (e.g.
          lung squamous cell carcinoma) and neurodegenerative diseases (e.g.
          Alzheimer's disease) -
            Patent: WO200104311-A1; Filing Date: 22-FEB-2000; 2000WO-US04414;
  JOURNAL
          Publication Date: 18-JAN-2001; Priority: 07-JUL-1999;
          99US-0143048. 26-JUL-1999;
                                       99US-0145698. 28-JUL-1999;
                                       99WO-US20594. 13-SEP-1999;
          99US-0146222. 08-SEP-1999;
          99WO-US20944. 15-SEP-1999; 99WO-US21090. 15-SEP-1999;
          99WO-US21547. 05-OCT-1999; 99WO-US23089. 29-NOV-1999;
          99WO-US28214. 30-NOV-1999; 99WO-US28313. 16-DEC-1999;
          99WO-US30095. 20-DEC-1999;
                                       99WO-US30911. 20-DEC-1999;
                                       99WO-US00219; Assignee: (GETH )
          99WO-US30999. 05-JAN-2000;
          GENENTECH INC; Cross Reference: WPI; 2001-081051/09. P-PSDB;
          AAB80255; Patent Format: Claim 2; Fig 89; 393pp; English.
COMMENT
            The present sequence is one of sixty one nucleic acids encoding
          novel secreted and transmembrane PRO polypeptides. The PRO
          polypeptides are useful for treating skin diseases (e.g. psoriasis),
          cancers (e.g. lung squamous cell carcinoma), gastrointestinal
          disorders (e.g. enterocolitis), neurodegenerative diseases (e.g.
          Alzheimer's disease, Parkinson's disease), wound repair,
          cardiovascular disorders (e.g. endometrial bleeding angiogenesis,
          ischaemias such as coronary ischaemia, atherosclerosis),
          inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple
          sclerosis), infertility, AIDS and diabetes and retinal disorders
          such as retinitis pigmentosum. The PRO nucleic acids have
          applications in molecular biology, including use as hybridization
          probes, and in chromosome and gene mapping.
FEATURES
                     Location/Qualifiers
BASE COUNT
                         365 c
                                            418 t
                414 a
                                  453 g
ORIGIN
```

P ABL95586 Human angiogenesis related cDNA PRO302 SEQ ID NO: 51. 650 bp, cDNA, PAT 19-JUL-2002

ACCESSION P ABL95586

KEYWORDS Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer; atherosclerosis; cardiac hypertrophy; gene therapy;

endothelial disorder; cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; gene; patent; GENESEQ patentdb. SOURCE Homo sapiens. ORGANISM Homo sapiens. REFERENCE 1 (bases 1 to 1650) **AUTHORS** Baker, K.P., Ferrara, N., Gerber, H., Gerritsen, M.E., Goddard, A. Godowski, P.J., Gurney, A.L., Hillan, K.J., Marsters, S.A., Pan, J., Paoni, N.F. Stephan, J.F., Watanabe, C.K., Williams, P.M., Wood, W.I., Ye,W. TITLE One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.q. myocardial infarction), endothelial or angiogenic disorders in a mammal -JOURNAL Patent: WO200208284-A2; Filing Date: 09-JUL-2001; 2001WO-US21735; Publication Date: 31-JAN-2002; Priority: 20-JUL-2000; 2000US-219556P. 25-JUL-2000; 2000US-220624P. 25-JUL-2000; 2000US-220664P. 28-JUL-2000; 2000WO-US20710. 02-AUG-2000; 2000US-222695P. 17-AUG-2000; 2000US-0643657. 23-AUG-2000; 2000WO-US23522. 24-AUG-2000; 2000WO-US23328. 07-SEP-2000; 2000US-230978P. 15-SEP-2000; 2000US-000000P. 18-SEP-2000; 2000US-0664610. 18-SEP-2000; 2000US-0665350. 24-OCT-2000; 2000US-242922P. 08-NOV-2000; 2000US-0709238. 08-NOV-2000; 2000WO-US30952. 10-NOV-2000; 2000WO-US30873. 01-DEC-2000; 2000WO-US32678. 20-DEC-2000; 2000US-0747259. 20-DEC-2000; 2000WO-US34956. 22-JAN-2001; 2001US-0767609. 28-FEB-2001; 2001US-0796498. 28-FEB-2001; 2001WO-US06520. 01-MAR-2001; 2001WO-US06666. 09-MAR-2001; 2001US-0802706. 14-MAR-2001; 2001US-0808689. 22-MAR-2001; 2001US-0816744. 05-APR-2001; 2001US-0828366. 10-MAY-2001; 2001US-0854208. 10-MAY-2001; 2001US-0854280. 25-MAY-2001; 2001US-0866028. 25-MAY-2001; 2001US-0866034. 25-MAY-2001; 2001WO-US17092. 30-MAY-2001; 2001US-0870574. 30-MAY-2001; 2001WO-US17443. 01-JUN-2001; 2001WO-US17800. 20-JUN-2001; 2001WO-US19692. 28-JUN-2001; 2001WO-US00000; Assignee: (GETH) GENENTECH INC. (BAKE/) BAKER K P. (FERR/) FERRARA N. (GERB/) GERBER H. (GERR/) GERRITSEN M E. (GODD/) GODDARD A. (GODO/) GODOWSKI P J. (GURN/) GURNEY A L. (HILL/) HILLAN K J. (MARS/) MARSTERS S A. (PANJ/) PAN J. (PAON/) PAONI N F. (STEP/) STEPHAN J F. (WATA/) WATANABE C K. (WILL/) WILLIAMS P M. (WOOD/) WOOD W I; Cross Reference: WPI; 2002-171999/22. P-PSDB; ABB95448; Patent Format: Claim 1; Fig 51; 567pp; English. The present invention provides the protein and coding sequences of COMMENT human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention. **FEATURES** Location/Qualifiers BASE COUNT 365 c 414 a 453 g 418 t ORIGIN P_ABL88097 Human PRO302 cDNA sequence SEQ ID NO:51. 650 bp, CDNA, PAT 16-MAY-2002 ACCESSION P ABL88097 KEYWORDS Human; angiogenesis; cardiant; cytostatic; antiangiogenic;

hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; angiogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; rheumatoid arthritis; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; gene; patent; GENESEQ patentdb. SOURCE Homo sapiens. ORGANISM Homo sapiens. REFERENCE (bases 1 to 1650) Baker, K.P., Ferrara, N., Gerber, H., Gerritsen, M.E., Goddard, A. AUTHORS Godowski, P.J., Gurney, A.L., Hillan, K.J., Marsters, S.A., Pan, J., Paoni, N.F. Stephan, J.F., Watanabe, C.K., Williams, P.M., Wood, W.I., Ye,W. TITLE One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -Patent: WO200200690-A2; Filing Date: 20-JUN-2001; 2001WO-US19692; Publication Date: 03-JAN-2002; Priority: 23-JUN-2000; 2000US-213637P. 20-JUL-2000; 2000US-219556P. 25-JUL-2000; 2000US-220624P. 25-JUL-2000; 2000US-220664P. 28-JUL-2000; 2000WO-US20710. 02-AUG-2000; 2000US-222695P. 17-AUG-2000; 2000US-0643657. 23-AUG-2000; 2000WO-US23522. 24-AUG-2000; 2000WO-US23328. 07-SEP-2000; 2000US-230978P. 18-SEP-2000; 2000US-0664610. 18-SEP-2000; 2000US-0665350. 24-OCT-2000; 2000US-242922P. 08-NOV-2000; 2000US-0709238. 08-NOV-2000; 2000WO-US30952. 10-NOV-2000; 2000WO-US30873. 01-DEC-2000; 2000WO-US32678. 20-DEC-2000; 2000US-0747259. 20-DEC-2000; 2000WO-US34956. 22-JAN-2001; 2001US-0767609. 28-FEB-2001; 2001US-0796498. 28-FEB-2001; 2001WO-US06520. 01-MAR-2001; 2001WO-US06666. 09-MAR-2001; 2001US-0802706. 14-MAR-2001; 2001US-0808689. 22-MAR-2001; 2001US-0816744. 05-APR-2001; 2001US-0828366. 10-MAY-2001; 2001US-0854208. 10-MAY-2001; 2001US-0854280. 25-MAY-2001; 2001US-0866028. 25-MAY-2001; 2001US-0866034. 25-MAY-2001; 2001WO-US17092. 30-MAY-2001; 2001US-0870574. 30-MAY-2001; 2001WO-US17443. 01-JUN-2001; 2001WO-US17800; Assignee: (GETH) GENENTECH INC; Cross Reference: WPI; 2002-090516/12. P-PSDB; ABB84842; Patent Format: Claim 2; Fig 51; 565pp; English. COMMENT ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention.

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               Godowski, P.J., Gurney, A.L., Hillan, K.J., Marsters, S.A., Pan, J.,
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                 Miano, J.M., Streb, J.W., Chen, J.
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                 New retinoid-inducible serine carboxypeptidase proteins and nucleic
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                 Patent: WO200268599-A2; Filing Date: 22-FEB-2002; 2002WO-US05560;
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               ROCHESTER; Cross Reference: WPI; 2002-713371/77. P-PSDB; ABB99215;
               Patent Format: Disclosure; Page 21-22; 129pp; English.
     COMMENT
                 The invention relates to a novel mammalian retinoid-inducible serine
               carboxypeptidase (RISC) protein or polypeptide. The proteins of the
               invention have antiarteriosclerotic, antihypertensive, nephrotropic,
               antiasthmatic, and vasotropic activity. The polynucleotides of the
               invention may have a use in gene therapy. The retinoid-inducible
               serine carboxypeptidase protein and the nucleic acid molecule are
               useful in detecting, preventing or treating vascular diseases or
               disorders, e.g. vascular hyperplasia, atherosclerosis, restenosis,
               glomerulonephritis, hypertension, obstructive bladder disease,
               tubulosclerosis, asthma or interstitial tubular disease, in
               inhibiting smooth muscle cell growth and inhibiting the activity of
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P_ABV77921 Hypoxia-induced protein coding sequence #35. 921 bp, DNA, PAT 12-NOV-2002

ACCESSION

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KEYWORDS

Cytostatic; vasotropic; tranquiliser; antiatherosclerotic; gene therapy; antiinflammatory; vulnerary; gynecological; ophthalmological; vaccine; hypoxia; tumourigenesis; angiogenesis; apoptosis; cancer; ischaemic condition; reperfusion injury; retinopathy; neonatal stress; preeclapmsia; atherosclerosis; inflammatory condition; wound healing; inflammation; erythropoiesis; hair loss; human; gene; patent; GENESEQ patentdb.

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REFERENCE

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AUTHORS

White, J., Mundy, C.R., Ward, N.R., Krige, D., Kingsman, S.M., Harris, R.A. Rayner, W.N.

TITLE

Identifying a gene involved in disease for treating hypoxia-regulated conditions, comprises comparing the transcriptome/proteome of two cell types under different conditions and identifying a differentially regulated gene

JOURNAL

Patent: WO200246465-A2; Filing Date: 10-DEC-2001; 2001WO-GB05458; Publication Date: 13-JUN-2002; Priority: 08-DEC-2000; 2000GB-0030076. 08-FEB-2001; 2001GB-0003156. 25-OCT-2001; 2001GB-0025666; Assignee: (OXFO-) OXFORD BIOMEDICA UK LTD; Cross Reference: WPI; 2002-627238/67; Patent Format: Claim 23; Page 306; 538pp; English.

COMMENT

The present invention relates to methods for identifying genes and proteins that are implicated in a specific disease or physiological condition. The method comprises comparing the transcriptome/proteome of a specialised cell type implicated in a disease or condition with that of a second specialised cell type, under two experimental conditions, and identifying a gene that is differentially regulated in the two specialised cell types under experimental conditions. ABV77873-ABV78116 and ABP65061-ABP65257 were identified using the methods of the invention. The coding sequences and proteins are useful for treating a disease in a patient, for manufacture of a medicament for treating hypoxia-regulated conditions, and for regulating tumourigenesis, angiogenesis, apoptosis, biological response to hypoxia conditions, or hypoxic-associated pathology in a patient. The coding sequences and proteins are also useful for monitoring the therapeutic treatment of a disease or physiological condition, such as cancer, ischaemic conditions, reperfusion injury, retinopathy, neonatal stress, preeclapmsia, atherosclerosis, inflammatory conditions, wound healing, inflammation, erythropoiesis or hair loss.

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ACCESSION AF282618

VERSION

AF282618.1 GI:10312168

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                                                519 t
    ORIGIN
    P AAH15579 Human cDNA sequence SEQ ID NO:13881. 641 bp, cDNA, PAT 26-JUN-2001
    ACCESSION
                P AAH15579
    KEYWORDS
                Human; primer; detection; diagnosis; antisense therapy; gene
              therapy; patent; GENESEQ patentdb.
    SOURCE
                Homo sapiens.
      ORGANISM
                Homo sapiens.
    REFERENCE
                    (bases 1 to 1641)
\sim
      AUTHORS
                Ota, T., Isogai, T., Nishikawa, T., Hayashi, K., Saito, K.,
              Yamamoto, J. Ishii, S., Sugiyama, T., Wakamatsu, A., Nagai, K.,
              Otsuki, T.
      TITLE
                Primer sets for synthesizing polynucleotides, particularly the 5602
              full-length cDNAs defined in the specification, and for the
              detection and/or diagnosis of the abnormality of the proteins
              encoded by the full-length cDNAs -
      JOURNAL
                Patent: EP1074617-A2; Filing Date: 28-JUL-2000; 2000EP-0116126;
              Publication Date: 07-FEB-2001; Priority: 29-JUL-1999;
              99JP-0248036. 27-AUG-1999;
                                           99JP-0300253. 11-JAN-2000;
              2000JP-0118776. 02-MAY-2000; 2000JP-0183767. 09-JUN-2000;
              2000JP-0241899; Assignee: (HELI-) HELIX RES INST; Cross Reference:
              WPI; 2001-318749/34; Patent Format: Claim 8; SEQ ID 13881; 2537pp +
              CD ROM; English.
    COMMENT
                The present invention describes primer sets for synthesising 5602
              full-length cDNAs defined in the specification. Where a primer set
              comprises: (a) an oligo-dT primer and an oligonucleotide
              complementary to the complementary strand of a polynucleotide which
              comprises one of the 5602 nucleotide sequences defined in the
              specification, where the oligonucleotide comprises at least 15
              nucleotides; or (b) a combination of an oligonucleotide comprising a
              sequence complementary to the complementary strand of a
              polynucleotide which comprises a 5'-end sequence and an
              oligonucleotide comprising a sequence complementary to a
              polynucleotide which comprises a 3'-end sequence, where the
              oligonucleotide comprises at least 15 nucleotides and the
              combination of the 5'-end sequence/3'-end sequence is selected from
              those defined in the specification. The primer sets can be used in
              antisense therapy and in gene therapy. The primers are useful for
              synthesising polynucleotides, particularly full-length cDNAs. The
              primers are also useful for the detection and/or diagnosis of the
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abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632 represent oligonucleotides, all of which are used in the exemplification of the present invention.

FEATURES

Location/Qualifiers

BASE COUNT

412 a 364 c

451 g 414 t

ORIGIN

P ABV28721 Human prostate expression marker cDNA 28712. 973 bp, cDNA, PAT 16-SEP-2002

ACCESSION P_ABV28721

KEYWORDS Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; patent; GENESEQ patentdb.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1973)

AUTHORS Schlegel, R., Endege, W.O., Monahan, J.E.

TITLE Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer -

JOURNAL Patent: W0200160860-A2; Filing Date: 20-FEB-2001; 2001WO-US05171; Publication Date: 23-AUG-2001; Priority: 17-FEB-2000; 2000US-183319P. 16-MAR-2000; 2000US-189862P. 25-MAY-2000; 2000US-207454P. 09-JUN-2000; 2000US-211314P. 18-JUL-2000; 2000US-219007P. 13-DEC-2000; 2000US-255281P; Assignee: (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC; Cross Reference: WPI; 2001-662795/76; Patent Format: Claim 1; Page 6030-6031; 11750pp; English.

COMMENT

The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker.

FEATURES

Location/Qualifiers

BASE COUNT 519 a

519 a 418 c 495 g 522 t 19 others

ORIGIN

AK027373 Homo sapiens cDNA FLJ14467 fis, clone MAMMA1000672, weakly similar to VITELLOGENIC CARBOXYPEPTIDASE PRECURSOR (EC 3.4.16.-). 1641 bp, mRNA, linear, PRI 01-AUG-2002

ACCESSION AK027373

VERSION AK027373.1 GI:14042005

KEYWORDS oligo capping; fis (full insert sequence).

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  AUTHORS
             Isoqai, T., Ota, T., Hayashi, K., Sugiyama, T., Otsuki, T., Suzuki, Y.,
          Nishikawa, T., Nagai, K., Sugano, S., Shiratori, A., Sudo, H.,
          Wagatsuma, M., Hosoiri, T., Kaku, Y., Kodaira, H., Kondo, H.,
          Sugawara, M., Takahashi, M., Chiba, Y., Ishida, S., Murakawa, K.,
          Ono, Y., Takiguchi, S., Watanabe, S., Kimura, K., Murakami, K.,
           Ishii, S., Kawai, Y., Saito, K., Yamamoto, J., Wakamatsu, A.,
          Nakamura, Y., Nagahari, K., Masuho, Y., Ninomiya, K. and Iwayanagi, T.
  TITLE
             NEDO human cDNA sequencing project
  JOURNAL
             Unpublished
REFERENCE
            2 (bases 1 to 1641)
  AUTHORS
             Isogai, T. and Otsuki, T.
  TITLE
             Direct Submission
  JOURNAL
             Submitted (10-MAY-2001) Takao Isogai, Helix Research Institute,
          Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan
           (E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)
COMMENT
            NEDO human cDNA sequencing project supported by Ministry of
          Economy, Trade and Industry of Japan; cDNA full insert sequencing:
          Research Association for Biotechnology; cDNA library construction,
          5'- & 3'-end one pass sequencing and clone selection: Helix
          Research Institute (supported by Japan Key Technology Center etc.)
          and Department of Virology, Institute of Medical Science,
          University of Tokyo.
FEATURES
                      Location/Qualifiers
     source
                      1..1641
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                    /clone="MAMMA1000672"
                    /tissue_type="mammary gland"
                    /clone lib="MAMMA1"
                    /note="cloning vector: pME18SFL3"
     CDS
                      27..1385
                    /note="unnamed protein product"
                    /codon_start=1
                    /protein id="BAB55069.1"
                    /db_xref="GI:14042006"
BASE COUNT
                 412 a
                         364 c
                                   451 g
                                            414 t
ORIGIN
BD157571
            Primer for synthesizing full-length cDNA and use thereof. 1641 bp,
          DNA, linear, PAT 17-JAN-2003
ACCESSION
            BD157571
VERSION
            BD157571.1 GI:27863329
KEYWORDS
            JP 2002191363-A/12414.
SOURCE
            Homo sapiens (human)
  ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
              (bases 1 to 1641)
  AUTHORS
            Qta, T., Isoqai, T., Nishikawa, T., Hayashi, K., Saito, K., Yamamoto, J.,
          Ishii, S., Sugiyama, T., Wakamatsu, A., Nagai, K. and Otsuki, T.
  TITLE
            Primer for synthesizing full-length cDNA and use thereof
  JOURNAL
            Patent: JP 2002191363-A 12414 09-JUL-2002;
          HELIX RESEARCH INSTITUTE
COMMENT
            os
                Homo sapiens (human)
              JP 2002191363-A/12414
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PΙ
          PΙ
                JUNICHI YAMAMOTO, SHIZUKO ISHII, TOMOYASU SUGIYAMA, AI WAKAMATSU.
          PΙ
                KEIICHI NAGAI, TETSUJI OTSUKI
          C12N15/09, C07K14/47, C07K16/18, C12N1/15, C12N1/19, C12N1/21, C12N5/ PC
           10,
          PC
                C12P21/02,C12Q1/68//C12P21/08,G06F17/30,C12N15/00,C12N5/00 CC
           Primer for synthesizing full-length cDNA and use thereof FH
                      Location/Qualifiers
          FT
                CDS
                                (27)..(1382).
FEATURES
                      Location/Qualifiers
                      1..1641
     source
                    /organism="Homo sapiens"
                    /db_xref="taxon:9606"
BASE COUNT
                 412 a
                          364 c
                                   451 q
                                            414 t
ORIGIN
P_AAH72787 Human cervical cancer marker nucleic acid 4061. 977 bp,
          CDNA, PAT 19-SEP-2001
ACCESSION
            P AAH72787
KEYWORDS
            Cervical cancer; cytostatic; pre-malignant condition; gene therapy;
          patent; GENESEQ patentdb.
SOURCE
            Homo sapiens.
  ORGANISM Homo sapiens.
REFERENCE
               (bases 1 to 1977)
            1
  AUTHORS
            Schlegel, R., Deeds, J., Berger, A., Zhao, X.
  TITLE
            New isolated nucleic acid for diagnosing and treating cervical
          cancer and for assessing and detecting compounds for treating the
          cancer -
  JOURNAL
            Patent: WO200142467-A2; Filing Date: 08-DEC-2000; 2000WO-US33312;
          Publication Date: 14-JUN-2001; Priority: 08-DEC-1999;
          99US-0169681. 21-DEC-1999;
                                       99US-0171350. 14-MAR-2000;
          2000US-0189315. 12-MAY-2000; 2000US-0203791. 09-JUN-2000;
          2000US-0210600. 21-JUL-2000; 2000US-0220114; Assignee: (MILL-)
          MILLENNIUM PREDICTIVE MEDICINE INC; Cross Reference: WPI;
          2001-375006/39; Patent Format: Claim 1; Page 853; 1051pp; English.
COMMENT
            The invention relates to novel genes (AAH68727-AAH73383) associated
          with cervical cancer with cytostatic activity. The nucleic acids and
          encoded polypeptides are useful: to assess if a patient is afflicted
          with cervical cancer or has a pre-malignant condition; to monitor
          the progression of cervical cancer or a premalignant condition in a
          patient; and to select and/or assess the efficacy of a compound or
          therapy for inhibiting cervical cancer in a patient. The nucleic
          acids may also be useful for gene therapy.
FEATURES
                     Location/Qualifiers
BASE COUNT
                         421 c
                520 a
                                   496 g
                                            521 t
                                                      19 others
ORIGIN
AX188369
            Sequence 4064 from Patent W00142467. 1977 bp,
          DNA, linear, PAT 06-AUG-2001
ACCESSION
            AX188369
VERSION
            AX188369.1 GI:15139842
KEYWORDS
SOURCE
            Homo sapiens (human)
 ORGANISM Homo sapiens
```

TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, KOJI HAYASHI, KAORU

DΠ

PF

PΙ

09-JUL-2002

28-JUL-2000 JP 2000280990

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

0

AUTHORS Schlegel, R., Deeds, J., Berger, A. and Zhao, X.

TITLE Genes, compositions, kits, and methods for identification,

assessment, prevention, and therapy of cervical cancer

JOURNAL Patent: WO 0142467-A 4064 14-JUN-2001;

Millennium Predictive Medicine, Inc. (US)

FEATURES

Location/Qualifiers

source

1..1977

/organism="Homo sapiens"

/db_xref="taxon:9606"

BASE COUNT ORIGIN 520 a 421 c 496 q

521 t 19 others

01(1011)

P_AAD12590 Human protein having hydrophobic domain encoding cDNA clone HP03959.
897 bp, cDNA, PAT 25-SEP-2001

ACCESSION

P AAD12590

KEYWORDS

Human; hydrophobic domain; gene therapy; nutritional supplement; cell proliferation; immunomodulatory; autoimmune disorder; antimicrobial; multiple sclerosis; rheumatoid arthritis; insulin-dependent diabetes; haematopoiesis; tissue growth activity; Parkinson's disease; cytostatic; Huntington's disease; Alzheimer's disease; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour growth inhibitor; anabolic; contraceptive; antiinfertility; antiinflammatory; patent; GENESEQ patentdb.

SOURCE

Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1897)

AUTHORS Kato, S, Kimura, T.

TITLE Human proteins with h

Human proteins with hydrophobic domains and the nucleic acids encoding them, useful for preventing diagnosing and treating e.g.

cancer, Alzheimer's and inflammation -

JOURNAL

Patent: WO200149728-A2; Filing Date: 28-DEC-2000; 2000WO-JP09359; Publication Date: 12-JUL-2001; Priority: 06-JAN-2000; 2000JP-0000585. 06-JAN-2000; 2000JP-0000588. 11-JAN-2000; 2000JP-0002299. 03-FEB-2000; 2000JP-0026862. 03-MAR-2000; 2000JP-0058367; Assignee: (PROT-) PROTEGENE INC. (SAGA) SAGAMI CHEM RES CENT; Cross Reference: WPI; 2001-418355/44. P-PSDB; AAE06595; Patent Format: Claim 4; Page 410-413; 563pp; English.

COMMENT

The present sequence is human protein with hydrophobic domain encoding cDNA clone HP03959. The polynucleotide and polypeptide of the invention may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. The polynucleotides may be used to produce the polypeptide, by inserting the nucleic acids into a host cell and culturing the cell. to express the protein. The polynucleotides and its complementary sequences may also be used as DNA probes in diagnostic assays and also used in gene therapy. The polypeptides may also be used as antiqens in the production of antibodies and in assays to identify modulators of polypeptide expression and activity. The polypeptides and nucleic acids may be used as nutritional supplements, to modulate cytokine and cell proliferation activity, to modulate immune stimulation or suppression (e.g. for the treatment of microbial infections and autoimmune disorders such as multiple sclerosis, rheumatoid arthritis and insulin-dependent diabetes), to modulate haematopoiesis, to modulate tissue growth activity (e.g. for the treatment of Parkinson's disease, Huntington's disease and

```
modulate receptor ligand activity, to modulate inflammation and to
               inhibit tumour growth.
    FEATURES
                          Location/Oualifiers
                          8..1366
          CDS
                        /*tag= a
                        /product= "Human protein having hydrophobic domain"
                        /note= "CDS is specifically is claimed in claim 3"
          sig peptide
                          8..88
                        /*tag= b
                          89..1363
         mat peptide
                        /*tag= c
                        /product= "Mature human protein with hydrophobic domain"
    BASE COUNT
                     499 a
                              406 c
                                        477 g
                                                 515 t
    ORIGIN
    AX191563
                 Sequence 85 from Patent WO0149728. 1897 bp,
               DNA, linear, PAT 15-AUG-2001
    ACCESSION
                 AX191563
    VERSION
                 AX191563.1 GI:15209749
    KEYWORDS
    SOURCE
                 Homo sapiens (human)
      ORGANISM Homo sapiens
               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
               Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
    REFERENCE
      AUTHORS
                Kato, S. and Kimura, T.
0
      TITLE
                 Human proteins having hydrophobic domains and dnas encoding these
               proteins
      JOURNAL
                 Patent: WO 0149728-A 85 12-JUL-2001;
               Protegene Inc. (JP) ; SAGAMI CHEMICAL RESEARCH CENTER (JP)
    FEATURES
                          Location/Qualifiers
                          1..1897
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                          8..1366
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                        /codon start=1
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                        /db xref="GI:15209750"
    BASE COUNT
                     499 a
                              406 c
                                       477 q
                                                 515 t
    ORIGIN
                _Homo sapiens MSTP034 mRNA, complete cds. 1902 bp,
              mRNA, linear, HTC 12-APR-2002
    ACCESSION
                AF113214
    VERSION
                AF113214.1 GI:11640575
    KEYWORDS
                HTC.
    SOURCE
                Homo sapiens (human)
      ORGANISM
                Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
    REFERENCE
                   (bases 1 to 1902)
      AUTHORS
                Liu, B., Liu, Y.Q., Wang, X.Y., Zhao, B., Sheng, H., Zhao, X.W., Liu, S.,
0
              Xu, Y.Y., Ye, J., Song, L., Gao, Y., Zhang, C.L., Zhang, J., Wei, Y.J.,
              Cao, H.Q., Zhao, Y., Liu, L.S., Ding, J.F., Gao, R.L., Wu, Q.Y.,
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Alzheimer's disease), to modulate activin and inhibin activity (e.g. for controlling fertility), to modulate chemotactic and chemokinetic activity, to modulate haemostatic and thrombolytic activity, to

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Qiang, B.Q., Yuan, J.G., Liew, C.C., Zhao, M.S. and Hui, R.T.
  TITLE
            Direct Submission
            Submitted (15-DEC-1998) Molecular Medical Center for Cardiovascular
  JOURNAL.
          Disease, Cardiovascular Institute, CAMS & PUMC, 167, Bei Li Shi Lu,
          Beijing 100037, P.R. China
FEATURES
                     Location/Qualifiers
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                     1..1902
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                   /db xref="taxon:9606"
                   /tissue type="aorta"
     CDS
                     129..1337
                   /codon_start=1
                   /product="MSTP034"
                   /protein_id="AAG39285.1"
                   /db xref="GI:11640576"
BASE COUNT
                517 a
                         400 c
                                  475 q
                                           510 t
ORIGIN
P AAC75884 Human ORFX ORF1439 polynucleotide sequence SEQ ID NO:2877. 921 bp,
          cDNA, PAT 08-FEB-2001
ACCESSION
            P AAC75884
KEYWORDS
            Human; open reading frame; ORFX; detection; cytostatic;
          hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic;
          neuroprotective; anticonvulsant; osteopathic; antiarthritic;
          immunosuppressant; cardiant; immunostimulant; thrombolytic;
          coagulant; vasotropic; antidiabetic; hypotensive; dermatological;
          immunosuppressive; antiinflammatory; antiviral; antibacterial;
          antifungal; antirheumatic; antithyroid; antianaemic; gene therapy;
          cancer; proliferative disorder; hypertension; neurodegenerative
          disorder; osteoarthritis; graft vs host disease; cardiovascular
          disease; diabetes mellitus; hypothyroidism; SCID; AIDS; cholesterol
          ester storage; systemic lupus erythematosus; infection; severe
          combined immunodeficiency; malaria; autoimmune disorder; asthma;
          allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
          bone damage; cartilage damage; antiinflammatory disease;
          coagulation; thrombosis; contraceptive; patent; GENESEQ patentdb.
SOURCE
            Homo sapiens.
  ORGANISM Homo sapiens.
REFERENCE
               (bases 1 to 1921)
 AUTHORS
            Shimkets, R.A., Leach, M.
  TITLE
            Novel nucleic acids and peptides derived from open reading frame X,
          useful for treating e.g. cancers, proliferative disorders,
          neurodegenerative disorders and cardiovascular disease -
            Patent: WO200058473-A2; Filing Date: 31-MAR-2000; 2000WO-US08621;
  JOURNAL
          Publication Date: 05-OCT-2000; Priority: 31-MAR-1999;
          99US-0127607. 02-APR-1999;
                                       99US-0127636. 05-APR-1999;
          99US-0127728. 30-MAR-2000; 2000US-0540763; Assignee: (CURA-) CURAGEN
          CORP; Cross Reference: WPI; 2000-602362/57. P-PSDB; AAB41675; Patent
          Format: Claim 5; Page 2113-2115; 5507pp; English.
COMMENT
            AAC74446 to AAC77606 encode the proteins given in AAB40237 to
          AAB43397, which represent the human ORFX open reading frames 1 to
          3161. The ORFX sequences have activities such as: cytostatic;
          hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic;
          neuroprotective; osteopathic; anticonvulsant; antiarthritic;
          immunosuppressant; immunostimulant; cardiant; thrombolytic;
          coagulant; vasotropic; antidiabetic; hypotensive; dermatological;
          immunosuppressive; antiinflammatory; antibacterial; antiviral;
          antifungal; antirheumatic; antithyroid; and antianaemic. The
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sequences can be used for determining the presence of or predisposition to, or preventing or treating pathological conditions associated with an ORFX-associated disorder. The nucleic acids can be used to express ORFX proteins in gene therapy vectors. The proteins and nucleic acids may be used to treat cancers, proliferative disorders, neurodegenerative disorders, osteoarthritis, graft vs host disease, cardiovascular disease, diabetes mellitus, hypertension, hypothyroidism, cholesterol ester storage, systemic lupus erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to enhance coaqulation; to inhibit thrombosis; and as a contraceptive.

FEATURES

Location/Qualifiers

BASE COUNT ORIGIN

506 a 485 a 518 t 411 c 1 others

Human G-protein-coupled protease #133. 960 bp,

CDNA, PAT 23-APR-2002

P ABK30363 ACCESSION

KEYWORDS

Human; ss; gene; G-protein-coupled protease; gene therapy; transgenic; protease mediated disorder; proliferative disorder; differentiative disorder; developmental disorder; haematopoietic disorder; patent; GENESEQ patentdb.

SOURCE

0

Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE (bases 1 to 1960)

AUTHORS Robison, K.E.

TITLE

New polynucleotides encoding protease homologs of the G-protein-coupled protease family, useful in identifying agonists and antagonists for diagnosis and treatment of protease mediated disorders -

TOURNAL.

Patent: US6331427-B1; Filing Date: 26-MAR-1999; 99US-0280116; Publication Date: 18-DEC-2001; Priority: 26-MAR-1999; 99US-0280116; Assignee: (MILL-) MILLENNIUM PHARM INC; Cross Reference: WPI; 2002-129545/17; Patent Format: Disclosure; Column 173-176; 246pp; English.

COMMENT

The invention relates to an isolated human protease nucleic acid molecule comprising a nucleotide sequence of 546 base pairs, one of 268 fully defined in the specification. Also disclosed are production of an isolated polypeptide encoded by the nucleic acid, comprising introducing the nucleic acid into a host cell and culturing under conditions to express the protein from the nucleic acid, use of an antibody to detect the encoded protein in a sample and to modulate its in vivo activity, identifying agents that bind to the protein and identification of a polynucleotide agent that modulates the expression of the nucleic acid or its complement (i.e. gene therapy). The nucleic acid can be used to identify an agent that modulates the expression or activity of the nucleic acid, and can be used to isolate the protein. The nucleic acid can be used in diagnostic assays for determining nucleic acid expression as well as activity in the context of a biological sample (e.g., blood, serum, cells, tissue) to determine whether an individual has a disease or disorder, or is at risk of developing a disease or disorder, associated with aberrant expression or activity of the nucleic acid. The nucleic acid can be used to detect mutations in protease genes and gene expression products such as mRNA. The nucleic acid can be

used as hybridisation probes to detect naturally-occurring genetic mutations in a protease gene. The nucleic acid can be used in drug screening methods to identify agonists and antagonists that can be used to diagnose and treat such protease mediated disorders e.g., proliferative, differentiative, developmental or haematopoietic disorders. The nucleic acid can be used as probes, primers, in biological assays, to determine patterns of gene expression, to design ribozymes and to construct transgenic animals. The present sequence represents one of the 268 disclosed human G-protein-coupled protease cDNA sequences.

FEATURES

Location/Qualifiers

BASE COUNT

525 a 418 c 493 g 524 t

ORIGIN

P AAH89926 Human bone marrow cDNA, SEQ ID NO: 57. 940 bp, cDNA, PAT 01-OCT-2001

ACCESSION P AAH89926

KEYWORDS

Human; bone marrow; antiinflammatory; cytostatic; neuroprotective; antiviral; antibacterial; antifungal; anti-HIV; haemostatic; immunosuppressive; gene therapy; cytokine cell proliferation; cell differentiation modulator; immune disorder; infection; cancer; human immunodeficiency virus; HIV; autoimmune disorder; haemophilia; patent; GENESEQ patentdb.

SOURCE

0

Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 1940)

AUTHORS

Ford, J.E., Boyle, B.J., Tang, Y.T., Liu, C., Asundi, V., Chen, R., Ma, Y. Ren, F., Wang, J., Werhman, T., Xu, C., Xue, A.J., Yang, Y., Zhang, J. Zhao, Q.A., Zhou, P., Drmanac, R.T.

TITLE

Novel bone-marrow-expressed polynucleotides and polypeptides, useful for treating e.g. cancer and immune deficiency disorders -

JOURNAL

Patent: WO200153453-A2; Filing Date: 23-DEC-2000; 2000WO-US34960; Publication Date: 26-JUL-2001; Priority: 21-JAN-2000; 2000US-0488725. 25-APR-2000; 2000US-0552317. 09-JUL-2000; 2000US-0598042. 19-JUL-2000; 2000US-0620312. 03-AUG-2000; 2000US-0653450. 14-SEP-2000; 2000US-0662191. 19-OCT-2000; 2000US-0693036. 30-NOV-2000; 2000US-0250583; Assignee: (HYSE-) HYSEQ INC; Cross Reference: WPI; 2001-488707/53. P-PSDB; AAM00807; Patent Format: Claim 1; Page 244-245; 648pp; English.

COMMENT

The present sequence is one of 251 novel human polynucleotides expressed in the bone marrow. The polynucleotide and the polypeptide encoded by it are useful in the treatment of various immune deficiencies and disorders. The deficiencies and disorders may be genetic, may be caused by a viral (e.g. HIV), bacterial or fungal infection, or may result from an autoimmune disorder, a coagulation disorder (e.g. haemophilia), inhibition of tumour cell proliferation, suppression of an inflammatory response or treatment of a nervous system disorder such as Alzheimer's disease. Detection of the presence or increased expression of the polynucleotide or the protein it encodes is useful for the diagnosis and/or prognosis of one or more types of cancer. The polynucleotide and polypeptide can be used as nutritional sources or supplements and in the screening of chemical compounds as potential drugs.

FEATURES
BASE COUNT

Location/Qualifiers

537 a 410 c 469 g 524 t

ORIGIN

AX191553 Sequence 75 from Patent WO0149728. 1359 bp,

DNA, linear, PAT 15-AUG-2001 ACCESSION AX191553 AX191553.1 GI:15209735 VERSION KEYWORDS SOURCE Homo sapiens (human) ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE Kato, S. and Kimura, T.

Human proteins having hydrophobic domains and dnas encoding these AUTHORS TITLE **JOURNAL** Patent: WO 0149728-A 75 12-JUL-2001; Protegene Inc. (JP) ; SAGAMI CHEMICAL RESEARCH CENTER (JP) **FEATURES** Location/Qualifiers 1..1359 source /organism="Homo sapiens" /db_xref="taxon:9606"

375 g

329 t

337 a 318 c

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ORIGIN